

INDEX

Fifty-fifth Quarto Volume—July 1, 1913, to December 31, 1913.

AUTHORS

Abbott, R. B., 773, 1113
Airey, W. C., 1011
Allix, G., 1232
Arnold, Bion J., 1078
Auryansen, F., 508

Babcock, Allen H., 447
Bailey, N. E., 216
Basford, G. M., 7
Baumgartner, J. Hampton, 90
Bentley, F. W., Jr., 292
Boyd, George W., 1220
Bruce, John, 1010
Blaiklock, M. S., 970
Borden, H. P., 365
Bradt, Charles E., 855†
Brown, W. E., 646
Buell, D. C., 221
Burnett, R. W., 1075

Carpenter, A. W., 971
Childers, H. W., 1154
Clark, George A., 663
Clough, A. M., 980
Collett, Robert, 874
Colson, M. Clement, 919
Cox, James, 1115
Crawford, D. F., 762, 902
Crites, George S., 1192
Curran, Arthur, 1154

Defibaugh, Charles H., 1155
De Groot, E. H., Jr., 403
Delano, F. A., 1025
de Muralt, C. L., 230, 418
Donovan, P. H., 415
Dunn, Col. B. W., 23
Dunn, Samuel O., 1065
Dunning, S. W., 650

Elliott, Howard, 565, 615, 1115
Ely, Owen, 137

Fair, J. M., 504
Freeman, Lewis R., 191, 327, 657
Frith, A. C., 6
Fritts, J. C., 499
Fulcher, Nelson, 1156

George, H. F., 1012
Glenn, M. C., 1009

Hale, Arthur, 175, 363, 602
Hamilton, Frank, 1009
Hamilton, P. H., 299
Hansen, A. E., 770
Haycock, Winters, 218
Hayes, Raymond V., 450
Henderson, G. R., 174
Hill, James J., 821
Hill, J. Garrett, 414

Hine, Major Charles, 702
Holland, R., 978
Houston, H. A., 455
Hooper, William E., 954
Hopkins, E. T., 1113
Houston, Harold A., 958
Hulit, A. B., 140
Hurd, E. C., 744
Hustis, James H., 565

Johnson, Alba B., 271
Jones, Arthur B., 871
Josephs, L. C., Jr., 828

Kane, Martin, 983
Kerr, R. E., 617
Keyser, 990
King, Coleman, 772
Kipp, A., 765
Klapp, James O., 1225
Knowles, C. R., 289
Kraemer, M. J., 1155
Krake, H. G., 694

La Bach, Paul M., 55, 1035, 1214
Landon, H. C., 287
Lauck, E. C., 1157
Lee, Blewett, 767
Lee, Ivy L., 49
Leeds, J. S., 569
Leigh, E. B., 1161
Lemmerich, Gustave E., 189, 32†
Leonard, F., 968
Lewis, E. R., 771
Linn, John H., 1023
Lisman, F. J., 363
Loesch, Frank J., 659
Lord, Arthur R., 321
Low, Emile, 282
Lucore, F. M., 403

McColvin, E. L., 138
Macdonald, J. A., 1186
McKenzie, Edward F., 901
Mellen, Charles S., 918
Meredith, E. R., 1176
Milner, B. B., 279
Modjeski, Ralph, 558
Moon, B. H., 1185
Moore, L., 655
Morgan, J. J., 259, 981
Morrison, C. J., 84
Morrow, John D. A., 656
Morse, F. L., 743

Newcomb, H. T., 139

Patton, F. E., 743, 1156
Peter, S. B., 526
Pomeroy, L. R., 274

Pratt, J. R., 645
Prichard, Henry S., 646

Quigley, W. S., 819

Rear, G. W., 973
Redfearn, B. W., 568
Riley, C. C., 555
Riney, M., 116
Rink, George W., 1081
Ripley, E. P., 1020
Rizer, F. W., 293
Roberts, S. S., 504
Rommel, C. T., 91, 364
Rose, George W., 1012
Rudd, A. H., 625

Sabin, A. H., 984
Schall, F. E., 969
Schnatterbeck, Charles C., 5
Schuster, K. R., 259
Secrist, C. M., 568
Sheafe, J. S., 711, 915
Smith, C. E., 45
Stradling, E. G., 110
Street, Clement F., 136
Stretton, Clement E., 83
Sutherland, M. R., 1153
Swartz, A., 773
Swergal, E. E., 421

Thomas, C. H., 118
Thompson, A. I., 21
Thompson, John S., 980
Thorne, Clifford, 1020
Tinker, J. H., 1018
Townsend, W. B., 1159
Turnbull, W. F., 137
Turner, Avery, 6, 364
Turner, J. K., 1165
Turner, Walter V., 415
Tyrrell, Henry Grattan, 1230

Van Auken, C. L., 1191

Walker, Edward W., 1156
Walker, W. K., 972, 979
Weller, R. C., 1153
Wells, M. E., 563
Whigelt, George, 984
Willard, Daniel, 1025
Williams, J. C., 983
Wilson, Gordon, 830
Wilson, William G., 982
Wishart, J. G., 793
Wollner, William S., 1117, 1187
Wood, Walter D., 13, 83, 174
Worthington, B. A., 371, 872

Yeomans, George G., 857

GENERAL INDEX

[Illustrated articles are indicated thus*; Editorials thus†; Letters to Editor thus‡.]

- A**
- Accident:
 American Railway Association and Railway Accidents, 852†
 Automobile Accidents and Train Accidents, 27, 741†
 Automobile Accidents and White Flags, 576
 Automobile Safety Committee, 469
 Automobiles and Grade Crossings, 64, 360†, 991
 Block System and the Train Despatcher, 258†
 Brooklyn Rapid Transit at Jamaica Bay, 26
 Canadian Pacific near Ottawa, Ont., 26
 Central London at Shepherd's Bush, 1150†
 Central New England near Pleasant Valley, N. Y., 301
 Central of Georgia near Clayton, Ala., 993
 Chicago, Milwaukee & St. Paul near Forsythe, Mont., 714
 Cleveland, Cincinnati, Chicago & St. Louis near Stockwell, Ind., 814*
 Committee, Accident; Pennsylvania Railroad, 714
 Denver, Boulder & Western at Eldorado, Col., 198
 Doherty, Engineman, Released, 240
 Enginemen and Accidents, 743†
 Equipment not to be Burned; Pennsylvania Railroad, 714
 Erie, Construction Train, 198
 First Aid Instruction, 259†
 France, near Nice, 576
 Interstate Commerce Commission Bulletin No. 46, 383; No. 47, 759
 Legislation, Plea Against Hasty, 449
 Lehigh Valley near Slatington, Pa., 200
 Liverpool, England, 714
 Locomotive Failure, Early, 6†, 83†, 768
 Maintenance Standpoint, Accidents from, 515
 Manslaughter, Two Months for, 834
 Meeting-Point Rule, 344
 Mexico, near Saltillo, 576
 Midland Railway of England near Hawes Junction, 428
 Missouri Pacific at Brant, Mo., 270
 Mobile & Ohio at State Line, Miss., 795
 Monthly Summaries: June, 182; July, 329; August, 627; September, 860; October, 965
 New York, New Haven & Hartford at Frankford, 161
 New York, New Haven & Hartford at North Haven, 397†, 427, 441†, 442†, 461, 471, 482†, 575, 577, 599†, 602†, 619, 622, 628, 630
 New York, New Haven & Hartford at Stamford, 79†, 82†, 94, 125, 138†
 Pacific Electric near Los Angeles, Cal., 119
 Panama Railroad at Paraiso, 926
 Paris, Lyons & Mediterranean at Melun, France, 879, 1037
 Pennsylvania Railroad at Tyrone, Pa., 201, 494*
 Pennsylvania Railroad, near Wileys, Ohio, 575
 Pennsylvania Railroad Record, 26
 Publicity to Accidents, 740†
 Reducing, Methods of, 978
 Rescue of Passengers from a Flood, 345
 Responsibility and Duty, Sense of, Wanted, 482†, 743†
 Rochester & Eastern at Victor, N. Y., 198
 Safety First (See Safety First)
 Safeguards, Adjunctive, 689†
 Safety at Grade Crossings, 527
 Safety in Maintenance of Way Department, 1185
 Safety in the Paint Shop, 497
 Safety Loading of Logs, 301
 Safety of Railroad Travel, 715, 927
 Schroeder, Engineman, Acquitted, 4†
 Southern Pacific, Boiler Explosion, 159
 Steel Equipment and Accidents, 743†
 Surprise Checking, Pennsylvania Railroad, 715
 Trespass Problem, 640†, 667
 Trespassers Appealed to, 1037
 Trespassers on the New York Central, 255†, 267*
 Trespassers, Warning to, 575
- Accounting (See also Association of Transportation and Car Accounting Officers; also Society of Railway Financial Officers):
 Abandoned Property, Kansas City Southern Decision, 1093, 1107†
 Cost and Efficiency, 39†, 58, 137†
 Statistical Information Practices, 213†
 System of Accounts, Interstate Commerce Commission, 954
 Train Auditors on the M. K. & T., 1137
- Acetylene (See Lighting)
- Acworth, W. M.: Observations in America, 1137
- Aeroplane Flights, 160, 198, 240, 242, 301, 576, 628, 878
- Agriculture:
 Boll Weevil, War Against, 142
 Cotton Production in 1912, 31
- Agriculture (Continued):
 Dairy, Model, Pennsylvania Railroad, 342*
 Demonstration Trains, 473, 533, 717, 797, 881, 1140
 Development Department, Ann Arbor, 715
 Development of the Southern States, 883
 Farm Marketing to be Developed on St. L. & S. F., 1140
 Hampden County Improvement League, 29
 Kansas Bankers' Association and Farmers, 29
 Railways' Interest in Better Farming, 1006†
 Roads, Good, Pay for Themselves, 122
 Stock Raising to be Developed; Waycross & Western, 1090
 State Colleges, Campaign of, 1039
 Weeds, Damage by, 1036
- Air Brake (See Brake)
- Air Compressor (See Compressed Air)
- Alaska:
 Government Ownership of Railways, 6†
 President Wilson Favors Railroad Project, 1086
 Railway Development Needed, 421*
 Alcohol Heating & Lighting Company: Heater Car Tests, Alcohol, 53*
- American Association of Railroad Superintendents:
 Annual Convention, 358†, 374, 549†
 Wheatly, W. W., Address of, 397†
- American Car & Foundry Company: Steel Frame Box Car, St. L. & S. F., 598†, 609*
- American Electric Railway Claims Association: Publicity to Accidents and Delays, 740†
- American Foundrymen's Association: Powdered Coal as Fuel, 819
- American Institute of Consulting Engineers: Engineer Recommended for I. C. C., 1135
- American Iron & Steel Institute: Wrought Steel Wheel, 902
- American Locomotive Company:
 Annual Report, 362†
 Powerful Locomotives, Northern Pacific, 377*
- American Lock Nut Company: Absolute Lock Nut, 1194*
- American Railway Association:
 Accident Prevention, 852†
 Demurrage Agreements, Proposed Extension of, 425*
 Labor Economy, 769†
 Meeting at Chicago, 1087
 Scale Shops, 300
- American Railway Bridge & Building Association:
 Annual Convention, 769†, 784
 Cattle Guards, 769†, 788
 Motor Cars for Bridge Gangs, 786
 Preservation of Timber, 791
 Sewers and Drains, 786
 Snow Fences, 790
 Temporary Structures for Supporting Tracks, 787
 Water Supply, 784
- American Railway Engineering and Maintenance of Way Association (See American Railway Engineering Association)
- American Railway Engineering Association:
 Seams in Rails, 1082
 Statistics of Failed Rails, 529
- American Railway Safety Association: Convention, 564
- American Railway Tool Foremen's Association: Annual Convention, 158, 178
- American Society for Testing Materials:
 Annual Meeting, 15*
 Reports, Unsatisfactory, 172†
- American Society of Mechanical Engineers:
 Human Element in Industrial Management, 135†
 Box Car Design Problems, 1123
 Grashof Medal Presented to George Westinghouse, 1136
 Sheathed Steel Frame Box Cars of C. P. R., 1075*
 Steel Underframe Box Cars, 1081
- Ann Arbor: Department of Development, 715
- Annual Reports (See names of companies)
- Apprentice (See Education)
- Arbitration:
 Chicago & Western Indiana, 241, 469, 527, 597†
 Chicago, Burlington & Quincy, 878
 Board of Conciliation and Mediation, 134†, 155*
 Conductors and Trainmen, 26, 66, 81†, 119, 134†, 150, 155*, 200, 241, 343, 528, 575, 630, 666, 897†, 899†, 909, 927
 New Arbitration Law, 81†
 Southern Pacific, Electric Lines, 343, 357, 387
- Arch (See Bridges and Buildings)
- Arkansas & Memphis Railway Bridge & Terminal Company: Memphis Bridge, 824*
- Arizona Eastern: Novel and Effective Cattle Guard, 1186*
- Arizona Eastern:
 Novel and Effective Cattle Guard, 1186*
 Office Building for Hine System, 827*
- Armspear Manufacturing Company: Spheroidal Lens, 502*, 795
- Associated Engineering Societies of St. Louis: Kaw River Bridge Reconstruction, 45*
- Association of Railway Electrical Engineers: Convention, 756
 Gas-Electric Car, 828*
- Association of Transportation and Car Accounting Officers: Summer Meeting, 60
- Atchison, Topeka & Santa Fe:
 Annual Report, 811*†, 846
 Apprentices, Choosing from, 2†, 7*, 40†
 Loss and Damage Committee, 694†
 Oil Contract, 794
 Refrigerator Service Promised, 997
 Scrap Reclaiming, 260*, 278†, 739†
- Audible Signaling (See Signaling)
- Auditing (See Accounting)
- Australia: Gage Standardization, 40†
- Automatic Stops (See Signaling)
- Axle (See Wheel)
- B**
- Baggage:
 Rules; Pennsylvania Railroad, 714
 Punching Tickets for Baggage Transportation, 579
- Baldwin Locomotive Works:
 Letter of M. W. Baldwin, 427
 Pacific Type Locomotives, C. & O., 571*
- Ballast: Burning Earth for Ballast, 343
- Baltimore & Ohio:
 Anniversary Celebration at Wheeling, 89
 Annual Picnic, 161
 Annual Report, 1007*, 1050
 Care of Passengers, 666
 Concrete Tanks, 1183*
 Engine Terminal at Cumberland, Md., 709*
 Flood Reconstruction, 99†, 106*
 Safety First Clock, 576
 Safety Work, 301
 Staff Meeting, 629
 Ticket Agents' Contest, 714, 966
 Trespassers Appealed to, 1037
- Baltimore Western Dispatch, 717
- Bangor & Aroostook: Contracts with Employees, 240
- Bascule (See Bridges and Buildings)
- Bearings: Steel Journal Box, 966*
- Bessemer & Lake Erie: Transportation System, 491*
- Bills of Lading: Cotton Bills of Lading, 536, 669
- Block Signal (See Signal, Block)
- Boiler (See Locomotive Boiler)
- Boiler Inspection: Report of Chief Inspector, 1209†, 1233
- Boston & Maine:
 Effect of Law Regulating Security Issues, 1150†
 Extension from Hinsdale, N. H., to Brattleboro, Vt., 661*
- Joint Report on B. & M. Freight Rates, 1201
- Signals at Junction Points, 1108†
- Yard at Mechanicville, N. Y., 775*
- Brake (See also Air Brake Association):
 Air Brake Hose (See Hose)
 Air Brakes and Modern Conditions, 415
 Care of Locomotive Brake Equipment, 337
- Brandeis, Louis D., 687
- Bridges and Buildings:
 Angle Iron Clips for Bridge Stringers, 781*
 Bascule Bridge, Double Deck, 603*
 Bridge Inspection on the B. R. & P., 1178
 Bridge at Rome, N. Y.; N. Y. C. & H. R., 282*
 Concrete Buildings, D. L. & W., 511*
 Economical Bridge Erection, 1193*
 Fireproof Bridges and Fires, 769†
 Foremen, Don'ts for Bridge, 981
 High Cantilever Bridge in Mexico, 1222*
 Inspection Methods, 968†, 969*
 Jamaica Office Building, Long Island, 183*, 508*
 Kaw River Bridge Reconstruction, 45*
 Kenova Bridge, Norfolk & Western, 400†, 407*
 Louisville & Nashville Bridge Work, 143*, 225*
 Memphis Bridge, Arkansas & Memphis Railway Bridge & Terminal Company, 824*
 Motor Cars for Bridge Gangs, 786
 Office Building for Hine System, 827*
 Opening Bridges, Preliminary Considerations in the Design of, 1230
 Organization for Bridge Building, 116
 Paint, Tests of Bridge, 1179
 Quebec Bridge, 365*, 559*
 Raising Track or Building Trestle, 1188
 Schuylkill River Bridge Improvements, 1173*
 Swing Spans, Double Track, Renewing, 699*
 Trestles over Newark Bay Rapidly Rebuilt, 24
- Brooklyn Rapid Transit:
 Accident at Jamaica Bay, 26
 Annual Report, 485†, 543

Brooklyn Rapid Transit (*Continued*):
 Brakes for New York Street Cars, 125
 Medical Inspection Bureau for Employees, 63
 Buchannon & Northern: Construction, 598†, 617*
 Buffalo, Rochester & Pittsburgh:
 Annual Report, 318†, 355
 Device for Loading Ties, 1181*
 Bridge Inspection, 1178
 Building (See Bridges and Buildings)
 Bumping Posts, Necessity for, 741†
 Bureau of Railway Economics:
 Meeting, 795
 Revenues and Expenses for May, 203*; for June, 535*; for July and August, 881*; for September, 1040*
 Bureau of Railway News and Statistics: Railway Earnings for 1912-13, 630
 Bureau of Standards of Department of Commerce: Standard Scale Test Car, 114, 985*

C

Cab Signal (See Signaling)
 Canada:
 Freight Cartage, Free, Abolished, 68
 Rail Production in 1912, 388
 Safety Appliances, U. S., Required, 119
 Canadian Government Railways: Discipline Without Suspension, 530
 Canadian Locomotive Company: Power Reverse Gear, 713*
 Canadian Northern:
 Montreal Terminal, 640†, 651*
 Safety Loading of Logs, 301
 Canadian Pacific:
 Accident near Ottawa, Ont., 26
 All-Steel Trucks, 1163*
 Annual Report, 400†, 438
 Bascule Bridge, Double Deck, at Fort William, 603*
 Box Car for Grain and Coal Traffic, 57*
 Dining Car Service, 470
 First Aid to Injured Car, 469
 Funded Debt, 39†
 Heater Car Tests, Alcohol, 53*
 Oil as Fuel, 386
 Sheathed Steel Frame Box Cars, 1075*
 Canal (See Waterways)
 Capitalization (See Finance)
 Car:
 Ballast Car, Repairing, 990
 Bearings (See Bearings)
 Box Car for Grain and Coal Traffic, Canadian Pacific, 57*
 Box Car, Steel Frame; St. L. & S. F., 598†, 609*
 Business Cars, Pennsylvania Railroad, 628
 Carlines, Pressed Steel, 425*
 Convertible Stock and Box Car, 1126*
 Coupler and Draft Sill Repairs, 1055†
 Coupler Release Rigging, 1168*
 Dairy Car, Pennsylvania Railroad, 342*
 Design of Box Car Problem, 1123
 Door, Mail Car, 240*
 Dump Car, Automatic Air, 295*
 End Construction for Pullman Cars, New, 231*
 Export of British and American Cars, 572
 First Aid to Injured Car, 469
 Freight Cars in Service, 458
 Gas-Electric Car, 828*
 Gasolene (See Motor Car)
 Heater Car Tests, Alcohol, 53*
 Hospital Car, C. R. I. & P., 748*
 Inspection (See Motor Car)
 Interchange (See Car Service)
 Lighting (See Lighting)
 Link Side Bearing Truck, 1167*
 Loading of Coal Cars, Proper, 1083*
 Lunch Counter Car, Pennsylvania, 1086
 Machine Car for Construction Work, 285*
 Motor (See Motor Car)
 Painting (See Paint)
 Quarry Car, 510*
 Repairs, Need for, 43†
 Safety Appliances (See Safety Appliances)
 Safety Exhibit Car, N. Y. C. & H. R., 213†, 228*
 Scale Test Car, U. S. Bureau of Standards, 114, 985*
 Scoop Car for Removing Slides, 987*
 Sheathed Steel Frame Box Cars of C. P. R., 1075*
 Slack Adjuster (See Brake)
 Stake Pocket, Collapsible, 1169*
 Steel Underframe Box Cars, 1081
 Steel Passenger Car Increase, 257†, 269
 Steel Passenger Train Car Situation, 941†, 947*
 Troubles, Freight Car, 499*
 Truck (See Truck)
 Ventilation (See Ventilation)
 Wheel (See Wheel)
 Car, Freight (See Car)
 Car, Passenger (See Car)
 Car Service (See also American Association of Demurrage Officers; also American Railway Association; also Interstate Commerce Commission Rulings; also Association of Transportation and Car Accounting Officers):
 Car Balance and Performance, March, 29*; April, 306*; May, 474*; June, 669*; July, 930*; August, 1202*
 Car Shortage, Activity to Prevent, 575

Car Service (*Continued*):
 Car Shortages, Causes and Remedies for, 359†
 Car Shortage Circular of the Interstate Commerce Commission, 798
 Car Shortage, Co-operation to Prevent, 199, 428, 473
 Car Shortages, E. P. Ripley on, 406
 Congestion on the Prussian State Railways in 1912, 1209†, 1232
 Demurrage Agreements, Proposed Extension of, 425*
 Demurrage as a Remedy for Car Shortages, 1225
 Demurrage in Texas, 68
 Distributing Rules, Sunset Central Lines, 1086
 Freight Car Earnings, 646†
 Government Owned Cars, 414
 Inspection of Box Cars, Overhead, 898†
 Interchange Car Inspection, 376
 Loading of Cars, Increasing, 810†, 830
 Loading of Coal Cars, Proper, 1083*
 Movement, Increasing Freight Car, 175, 363†, 371, 399†, 403, 549†, 555, 579, 597†, 602†, 646, 992 (See also Yards and Terminals; Efficiency in Yard Service)
 Pooling of Freight Cars, 430, 941†, 957, 963
 Pooling of Freight Cars Under Government Ownership, 398†
 Repairs, Need for, 43†
 Track Storage Charge, 121
 Car Service Commission (See American Railway Association)
 Car Shortage (See Car Service)
 Carolina, Clinchfield & Ohio: Clinchfield Extension, 861*
 Cattle Guards, 769†, 788
 Cattle Guard, Novel and Effective: Arizona Eastern, 1186*
 Cement (See Concrete)
 Center of Gravity, Finding, 381*, 413
 Central of Ga.:
 Accident near Clayton, Ala., 993
 Educational Bureau, 63
 Central New England: Accident near Pleasant Valley, 301
 Central R. R. of N. J.:
 New Jersey & Pennsylvania, Operation of, Stopped, 794
 Renewing Two Double Track Swing Spans, 699*
 Traveler for Dismantling a Train Shed, 115*
 Central Ry. Club: Standard Test for Draft Gears Recommended, 499*
 Chambersburg Engineering Co.: Press, Hydraulic Forging and Bending, 665*
 Chase, Charles J., 73
 Chesapeake & Ohio:
 Annual Report, 642*†, 681
 Operating Study, 1053†, 1061*
 Pacific Type Locomotives, 571*
 Ticket Coupon Redemption Committee, 243, 473
 Yard at Silver Grove, Ky., 117*
 Chicago:
 Freight Terminal, M. St. P. & S. S. M., 321*
 Passenger Traffic, 1125
 Smoke Problem, 239
 Development of Railway Facilities, Proposed, 27, 64, 118, 320†, 388, 666, 992, 1078*, 1088, 1125, 1136, 1237
 Chicago, Burlington & Quincy:
 Annual Report, 854†, 893
 Arbitrators Selected, 878
 Bridge Inspection Methods, 968†, 974
 Construction Organization, 99†, 111
 Dining Car Service to the Pacific Coast, 797
 Legislative Retaliation Threatened for Refusal to Issue Passes, 1053†, 1097
 Operating Study, 85*
 Relief Department, 386
 Reports, Daily Time and Material, 503†, 505*
 Chicago & Eastern Illinois: Silence for Sleepers, 358†
 Chicago Great Western: Refunds During Rate Litigation, 26
 Chicago, Indianapolis & Louisville: Flood Reconstruction, 99†, 110*
 Chicago, Milwaukee & St. Paul:
 Accident near Forsythe, Mont., 714
 Electrification Progress, 1236
 Milwaukee Improvements, 19*
 Searchlight on Observation Cars, 160
 Chicago & New Orleans Transportation Company, 243
 Chicago & Northwestern:
 Annual Report, 552†, 590
 Foreign Representatives, 837
 Officers, Length of Service, 992
 Reports, Daily Time, 503†, 506*
 Safety First Results, 160, 992
 Signal Instruction, 1236
 Station Work Organization, 52
 White Audit System Discontinued, 837
 Chicago, Rock Island & Pacific:
 Annual Report, 691†, 733
 Dead Line for Station Platform, 426*

Chicago, Rock Island & Pacific (*Continued*):
 Fire Prevention Day, 1135
 Hospital Car, 748*
 Merits and Demerits, 64
 Pass Form, New, 275*
 Train of 99 Cars Hauled 111 Miles by One Locomotive, 270
 Y. M. C. A. Building, 834
 Chicago, St. Paul, Minneapolis & Omaha: Annual Report, 554†, 594
 Chicago Transportation Association: Educational Bureau, 837
 Chief Interchange Car Inspectors' and Car Foremen's Association: Interchange Rules, Interpretation of, 457
 Christmas Present Giving, 897†
 Claims:
 (See also Interstate Commerce Commission Rulings; also State Commission Rulings; also Freight Claim Association)
 Claim Department—An Asset, 655
 Containers, Unsatisfactory, and Claims, 23
 Frauds Punished, 244
 Freight Claim Blanks, 341*
 Inspection of Box Cars, Overhead, 898†
 Loss and Damage Committee, A. T. & S. F., 694†
 Mules Tied to Tracks, 628
 Weeds, Damage by, 1036
 Clapp Fire Resisting Paint Company, 293*
 Classification:
 Permanent Western Classification Committee, 1108†, 1140
 Uniform Freight Classification, 1041
 Cleaning (See Sanitation)
 Clearances, 967†
 Clearing House (See Accounting)
 Cleveland Car Specialty Company: Pressed Steel Carlines, 425*
 Cleveland, Cincinnati, Chicago & St. Louis: Divisional Organization Discontinued, 1135
 Wreck Caused by a Broken Tire, 814*
 Clubs, Suggestions for, 599†
 Coal (See Fuel)
 Competition:
 Enginemen's Lookout, 257†
 Foreman Problem, 526
 Proper Handling of Work Trains, 967†
 College Man and the Railroads, 49, 99†
 Colorado & Southern: Annual Report, 1158*†, 1101
 Commerce Court:
 (See also Interstate Commerce Commission; also Interstate Commerce Commission Rulings; also Legal Decisions; also Legislation)
 Abolition of, 470
 Louisville & Nashville Case, 475
 Movement to Abolish, 575, 666
 Work, Cessation of, 33
 Committee on Relations of Railway Operation to Legislation:
 Information Regarding Pending Legislation, 315†
 Legislation Relating to Operation, 256†, 270, 277†
 Steel Passenger Equipment Increase, 257†, 269
 Commonwealth Steel Co.: Tender Truck, Equalized Swing Motion, 386
 Commuters' Prize, 530
 Compressor: Portable Compressor with White-washing Device, 292*
 Concrete (See also Bridges and Buildings)
 Alkali and Sea Water, Action on Cement of, 514
 Buildings, D. L. & W., 511*
 Concrete Surfaces, Treatment of, 984
 Foundations for Heavy Service Track, 508*
 Slope of Chutes, 1177
 Tanks, Concrete, 1171†
 Tanks, on B. & O., 1183*
 Telegraph Poles, Reinforced Concrete, 286
 Ties, Design of Concrete, 259†
 Water Trough, Concrete, 783*
 Consolidation (See Finance)
 Control (See Finance; also Government Regulation)
 Construction, New:
 Boston & Maine, Hinsdale, N. H., to Brattleboro, Vt., 661*
 Buchannon & Northern, 598†, 617*
 Clinchfield Extension, C. C. & O., 861*
 Experiment on Track Construction, 277†, 279*
 Foundations, Concrete, for Heavy Service Tracks, 508*
 Grand Trunk Pacific, 715
 Lack of Data of Cost of, 1172†
 Machine Car for Construction Work, 285*
 Northwest, 398†
 Oklahoma, Prospects in, 577
 Organization for Construction Work; C. B. & Q., 111
 Portland, Eugene & Eastern, 453*
 Rome Improvements; N. Y. C. & H. R., 282*
 Summit-Hallstead Cut-Off, D. L. & W., 903*, 1069*
 Wasatch Mountains Line; D. & R. G., 1013*

GENERAL INDEX—Continued.

[Illustrated articles are indicated thus*; Editorials thus†; Letters to Editor thus‡.]

Conventions (See names of associations)
 Conveying Machinery (See Hoisting and Conveying)
 Cooling (See Refrigeration)
 Correspondence (See Organization)
 Cost (See Finance; also Maintenance of Way; also Construction; New; also Interstate Commerce Commission)
 Coupler (See Draft Gear)
 Coupler Release Rigging, 1168*
 Crane (See Hoisting and Conveying)
 Creosote (See Ties and Timber)
 Crop:
 Conditions, 68, 304, 473, 719
 Oats Crop, 163
 Crossing (See Grade Crossing)

D

Damages (See Claims)
 Dan Patch Lines: Gas-Electric Locomotive, 916*
 Delaware & Hudson: Foundry, Brass, Iron and Steel, 467*
 Delaware, Lackawanna & Western:
 Concrete Buildings, 511*
 Engineman Schroeder Acquitted, 4†
 Frog and Switch Shops, 975*
 Montclair, N. J., Station, 9*, 54
 Rewards for Suggestions from Employees, 1196
 Safety Results, 387
 Summit-Hallstead Cut-Off, 903*, 1069*
 Demurrage (See Car Service)
 Denver, Boulder & Western: Accident at Eldorado, Col., 198
 Denver & Rio Grande:
 Rail Section, 90-lb., 774*
 Telephone Train Despatching, 1085
 Wasatch Mountains Line, 1013*
 Denver & Salt Lake: Moffat Tunnel Report, 1036
 Derailments: Responsibility for Minor, 1177
 Derrick (See Hoisting and Conveying)
 Detroit, Toledo & Ironton: Twenty Locomotives Condemned, 628
 Discipline (See Employee)
 Docks (See Yards and Terminals)
 Draft Gear:
 Greater Strain on, 1055†
 Standard Test for Draft Gears Recommended, 499*
 Drawbridge (See Bridges and Buildings)
 Drill: Gasoline Rock Drill, 780*
 Drinking (See Sanitation; also Employee)
 Duluth & Iron Range: Ore Docks at Two Harbors, Minn., 486*

E

Earnings (See also names of Companies)
 Earnings for 1912-13, 630
 Earnings in 1912 and 1902, 650
 Freight Car Earnings, 646†
 Incomes, Railway, 492
 Interstate Commerce Commission, Revenues and Expenses for June, 392; August, 670; September, 883
 Mail Pay; see Mail
 Revenues and Expenses for May, 203*;
 June, 535*;
 July and August, 881*;
 September, 1040*
 Revenues and Expenses in 1912, 181
 East Broad Top Railroad & Coal Company: Inspection Motor Car, 523*
 Economic Practices:
 Boiler Tubes, Old, Used Again; Southern Pacific, 63
 Coal Pile, Watching the, 221
 Engine Failures, 255†
 Fuel, Cheaper, for Pumping Engines, 277†, 289
 Fuel Economy, 563*, 874*
 Fuel Economy and the Operating Department, 332, 402†
 Fuel Economy, St. L. & S. F., 874*
 Overloading Freight Locomotives not Economical, 915
 Reclamation of Scrap Tool Steel, 158
 Scrap Reclaiming, A. T. & S. F., 260*, 278†, 739†

Education:

Air Brake Instruction, Western Maryland, 343
 Apprentices, Choosing from, 2†, 7*, 40†
 Apprentice Instructors, N. Y. C. & H. R., Conference of, 639†
 Apprenticeship, 151, 1023
 College Man and the Railroads, 49, 99†, 851†
 Education Bureau, Chicago Transportation Association, 837
 Educational Bureau of the Union Pacific, the Illinois Central and the Central of Georgia, 63
 Efficiency Correspondence Schools, 807†
 Engineering Course, Co-Operative; University of Cincinnati, 298*
 First Aid Instruction, 259†
 Foremen from Clerks, 1187
 North Western University School of Commerce, 426

Education (Continued):

Safety First Movement (See Safety First)
 Scholarships, Southern Pacific, 878
 Traveling Engineers, Duties of, 315†, 331
 University of Minnesota Railway Course, 629
 Efficiency Methods (See also Maintenance of Way; also Fuel):
 Efficiency Correspondence Schools, 807†
 Engine House Efficiency, 153*
 Human Element in Industrial Management, 135†
 Labor Saving Appliances, Use of, 1172†
 Men, Use of Experienced, 1172†
 Wells, Fargo & Company Express, 160
 Electric Carrier System, 624*
 Electric Storage Battery Co.; Axle Lighting System, Constant Voltage, 923*
 Electric Traction (See Locomotive, Electric)
 Electrification:
 Chicago Terminals, 666
 Electric Railroading, Principles of, 230*, 418
 London & Port Stanley to be Electrified, 834
 Long Island Railroad, 794
 Mountain Railway Electrification, Tehachapi Pass, Southern Pacific, 441†, 447*
 Norfolk & Western, 241, 387
 Pennsylvania Railroad at Philadelphia, 577
 Troubles with Employees on Electric Lines of S. P., 343, 357, 387
 El Paso & South Western: Economical Bridge Erection, 1193*
 Embankment (See Maintenance of Way)
 Employee (See also Legislation; also Education; also Officers; also Interstate Commerce Commission Rulings; also Legal Decisions; also Accident):
 Accidents and Employees, 482†, 743†
 Apprentice (See Education)
 Bridge Foremen, Don'ts for, 981
 Contracting of Maintenance Work, 503†, 516
 Contracts, Bangor & Aroostook, 240
 Compensation Legislation, 1180
 Co-operation of Pullman Employees, 1154†
 Courtesy on the Intercolonial, 441†
 Discipline and the Brotherhoods, 316†
 Discipline Made Just, 1109†
 Discipline, Weak Spots in, 550†
 Discipline Without Suspension, 530
 Discourtesies, College Man to Detect, 1†, 84†
 Drinking and Safety, 529
 Drinking, Prosecutions for, 714
 Electric Operation, Demands for Regular Wages with, on S. P. Lines, 343, 357, 387
 Engineman Doherty Released, 240
 Engineman Rewarded for Capturing Robber, 343
 Engineman Schroeder Acquitted, 4†
 Engineman's Tombstone, 6†, 83†, 768
 Enginemen and Accidents, 743†
 Enginemen and Surprise Tests, 851†
 Enginemen Annoyed by Automobile Lights, 1210†
 Enginemen: Keeping a Perfect Lookout, 257†, 898†, 901, 1006†, 1009, 1155
 Enginemen, Making of, 44†
 Enginemen, Remarkable Records, 927
 Enginemen's and Firemen's Conventions, 133†
 First Aid Instruction, 259†
 Foreman Problem, 526, 1171†, 1187
 Government Ownership and the Railway Employee, 1165
 Homes, Distant, 602†, 942†
 Hours of Service Law in Massachusetts, 40†, Labor and Capital, Monopolists of, 577
 Labor Economy, 769†
 Labor Investigation, 964
 Labor, Maintenance, Holding, 503†, 769†, 771, 979
 Labor, President Worthington on, 667
 Labor Problem, Plan for Solving, 663
 Labor, Track, Economies of, 521
 Labor Unions Denounced, 39†, 52
 Labor Unions, Governor Foss on, 530
 Manslaughter, Arrests for, 198
 Medical Inspection Bureau for Employees, 63
 Merits and Demerits, 64, 171†, 201
 Number of Employees in 1912, 180
 Ordinary Comforts for Section Forces, 1192*
 Passes, 138†
 Passes in Illinois, 1036
 Passes in Missouri, 29
 Passes on the Great Northern and Northern Pacific, 430
 Pass Form, Rock Island Lines, 275*
 Patron and Employee, 1065
 Pensions, Pennsylvania System, 344, 469
 Pictures on Watches of Employees Forbidden, 794
 Profit Sharing, U. S. Steel Corporation, 1036
 Recommendation Letter Forgeries, 833
 Relief Fund, Lehigh Valley, 628
 Reports, Daily Time and Material, 503†, 505*
 Rewards for Suggestions, 1196

Employee (Continued):

Roundhouse Foreman and the Road Foreman, 44†
 Safety First; see Safety First
 Section Foremen from Clerks, 1187
 Seniority or Fitness to Govern in Promotion of Enginemen and Firemen, 119, 528, 598†, 641†, 687†, 794, 834
 Signal Maintainer, 2†
 Sleeping on Duty, Imprisonment for, 470
 Strike:
 Disturbances Concerning Wages, 119
 Northern Pacific, 198
 Sunset Lines, 926, 942†, 959, 1085
 Western Enginemen Threaten, 825
 Surprise Checking, Pennsylvania Railroad, 715
 Training, 765
 Trainmen and Their Employers in Tennessee, 927
 Traveling Engineers, Duties of, 315†, 331
 Wages:
 Brakemen and College Professors, 1037
 Engine House Pay, 446†
 Increased Wages as Affecting the Railway Patron, 1065
 Legislation Affecting Wages, 871
 Prices and Railway Rates, 899†, 919
 Wage Increase:
 Chicago & Alton, 1195
 Chicago, Rock Island & Pacific, 833
 Grand Trunk, 1085
 Intercolonial, 301
 Mobile & Ohio, 118
 Philadelphia Rapid Transit, 26
 Sumpter Valley, 1085
 Trinity & Brazos Valley, 1036
 Y. M. C. A. Building, Appreciation of, 834
 Engine (See Locomotive; also Locomotive, Electric)
 Engineering and Maintenance of Way Association (See American Railway Engineering Association)
 England (See also subjects):
 Accident at Liverpool, 714
 Accident at Shepherd's Bush, 1150†
 Accident on the Midland Railway, 428
 Capitalization of English and American Railroads, 271
 Commission to Study Nationalization, 1054†
 Indicators, Train, at Charing Cross, 1122*
 London & Port Stanley to be Electrified, 834
 Manslaughter, Two Months for, 834
 Trains, American Impression of, 197
 Equipment (See Car; also Car Service; also Locomotive; also Locomotive Performance):
 Equipment Service in 1912, 180
 Export of British and American Railway Equipment, 572
 Facilities, Better, Needed, 807†
 Freight Cars in Service, 458
 Steel Passenger Equipment Increase, 257†, 269
 Valuation Assignment by States, 21*
 Erie:
 Accident, Construction Train, 198
 Explosives, Shipments of, 794
 Safety First, 388
 Safety Record, 304
 Excavation: Steam Shovel, Moving, with Traction Engines, 782*
 Exhibits (See names of associations)
 Explosives (See American Railway Association)
 Dangerous Cars for Explosives, 794
 Dynamite, Buildings for, 386
 Tunneling, Explosives for, 526
 Exposition (See Exhibits)
 Express (See also names of companies; also Interstate Commerce Commission Rulings):
 California Commission Reduces Express Rates, 244
 Express Companies as Foreign Passenger Agents, 390
 Rate Decisions, 233, 838
 Rate Reductions in New Mexico, 719
 Foodstuffs, Handling, 384
 United States Express Company Annual Report, 669
 Experimental Railroad in Germany, 524*

F

Fairbanks Co.: Standard Track Scale of the P. & L. E., 103*
 Fare (See Passenger Fares)
 Farmers' Union of Texas: Train Crew Resolutions, 343
 Farming (See Agriculture)
 Fast Trains and Runs: Chicago to New York, 714
 Feet and Miles Table, 793
 Ferry Steamer, Western Pacific, 501*
 Files (See Organization)
 Finance:
 Effect of Law Regulating Security Issues; Boston & Maine, 1150†
 Stockholders' Association, 1237

Finance (See also Accounting):

- Annual Report Forms, 808†
- Banking Influence on Railroad Management, 443†
- Capitalization in 1912, 180
- Consolidation of New York Central and the Lake Shore, 41†
- Elliott, Howard, to New Haven Stockholders, 387
- Funded Debt and Foreclosure, 39†
- Investment Conditions, 821
- Overcapitalization and American Railroads, 271
- Statistics, Juggling, 853†, 1020
- Wheatly, W. W., Address of, 397†

Fire (See also Railway Fire Protection Association):

- Fireproof Bridges and Fires, 769†
- Forest Protection, 469
- Locomotives with Fire Extinguishers, 628
- Oil Burning Locomotives Demanded in Massachusetts, 666
- Prevention Day on the Rock Island, 1135
- Prevention of Fire on the Western Pacific, 578*
- Water, Prevention from Freezing, 926

Firebox (See Locomotive Firebox)

Filing, Correspondence, Use of I. C. C. Account

- Numbers, 1117

Flag (See Signaling)

Flange (See Wheel)

Flood (See also Maintenance of Way):

- Damages of the March Floods, 26
- Ohio Floods, 118, 628
- Reconstruction; B. & O., 99†, 106*
- Reconstruction on the Monon, 99†, 110*
- Rescue of Passengers from a Flood, 345
- Forest Preservation (See Fire)
- Forestry (See Agriculture)
- Foss, Gov., and Enginemen's Strike, 530, 687†
- Foundry, Brass, Iron & Steel; Delaware & Hudson, 467*

France:

- Accident at Melun, 879, 1037
- Prices and Railway Rates, 899†, 919
- Franklin Institute: Quebec Bridge, Design of, 559*

Freight (See also State Commission Rulings; also Interstate Commerce Commission Rulings; also Car Service):

- Containers, Unsatisfactory, 23
- Freight Claim Association:
 - Annual Meeting, 97
 - Freight Claim Blanks, 341*
- Freight Claims (See Claims)
- Freight Rates (See also Interstate Commerce Commission Rulings; also State Commission Rulings):

- Advanced Freight Rate Hearings, 3†, 10, 121, 203, 304, 430, 473, 739†, 899†, 919, 1025, 1053†, 1130, 1149†, 1151†, 1161*
- Advanced Freight Rate Hearings, Opinion of W. M. Acworth, 1137
- Advanced Rates Needed, 140, 872
- Armour Favors Rate Advances, 60
- Boston Import Rates, 837
- Cost and Efficiency, 39†, 58, 137†
- Increased Rates on B. & M., 1201
- Minnesota Rate Decisions, Significance of, 139†

- Overcharges Refunded in Oklahoma, 924
- Refunds During Rate Litigation, C. G. W., 26
- Universal Freight Rate Base Sheet, 1234

Freight Rate Reductions (See also Interstate Commerce Commission Rulings; also State Commission Rulings):

- Great Northern, 837
- Minneapolis, St. Paul & Sault Ste. Marie, 837
- North Carolina, 930
- Southern Pacific, 929
- Western Roads to Oppose Rate Reductions, 200

Freight Soliciting: Freight Solicitor's Art, 1159

Freight Traffic (See also Traffic)

Freight Yards (See Yards and Terminals)

Frog (See Switch)

Fuel (See also International Railway Fuel Association):

- Cincinnati Smoke Inspection Bureau, 878
- Coal Mining Adjuncts of Railroads, 656
- Coal Pile, 221
- Coal Sprinkler, 385*
- Coal Sprinkling, Safety Squirt for, 664*
- Coaling Stations on the Oregon Short Line, 1178*
- Economy, 563*, 874*
- Economy and the Operating Department, 332, 402†

- Lignite Coal Testing Plant, 1121
- Oil on the Canadian Pacific, 386
- Powdered Fuel for Locomotives, 1†, 13, 83†, 136†, 174†, 819
- Pumping Engines, Cheaper Fuel for, 277†, 289

- Smoke Abatement, 336, 762
- Smoke Prevention and the Mechanical Stoker, 25
- Smoke Problem in Chicago, 239
- Smoke Problem in Pittsburgh, 714
- Smoke Washing Plant at Englewood, 1022*

Full Crew Laws (See Legislation)

G

- Gage: Australian Standard Gage, 40†
- Gear: Power Reverse Gear, 713*
- General Electric Company: Articulated Electric Locomotives; N. Y. C. & H. R., 868*
- General Railway Signal Company: Train Dispatcher's Selector, 384
- Germany: Experimental Railroad, 524*
- Glass, Frame for Carrying, 118*
- Government Ownership of Railways:
 - Alaska, 6†
 - Arguments Pro and Con, 1110†
 - Car Pooling, 398†
 - English Commission to Study Nationalization, 1054†
 - Freight Rates on State and Private Railways, 739†
 - Government Owned Cars, 414
 - Government Ownership the Alternative, 1037
 - Muckrakers, Agitation of, 688†
 - Probable Results, 1214†
 - Railway Employee and Government Ownership, 1165
 - Savings, Possibility of, 1020
- Government Regulation (See also Interstate Commerce Commission; also State Commissions):
 - Aspects of Railway Regulation, 659
 - State Commission Appointments, Injudicious, 39†
- Grade Revision (See also Construction, New):
 - Louisville & Nashville Grading Work, 143*, 225*
 - Minimum Efficient Gradient, 55*
- Grade Crossings:
 - Abolition Requirements, 1109†, 1118
 - Automobiles and Grade Crossings, 64, 360,† 991
 - Grade Crossing Conferences, 666
 - Jamaica Improvements, Long Island, 183*, 508*
 - Long Island, 302
 - New York, New Haven & Hartford, 241, 387
 - Safety at Grade Crossings, 527
- Grand Trunk:
 - Bridge Inspection Methods, 968†, 970*
 - Safety First, 387, 834, 879
 - Wages of Station and Telegraph Employees Increased, 1985
- Grand Trunk Pacific: Construction Work, 715
- Grashof Medal Presented to George Westinghouse, 1136
- Gravel (See Ballast)
- Gray-Thurber Automatic Stop, 833
- Great Britain (See England)
- Great Northern: Triangular Ties, 782*

H

- Halifax Ocean Terminals Railway, 388
- Hamburg-American Steamship Company: Pool Agreement, Retirement from, 203
- Hancock Inspector Company: Coal Sprinkler, 385*
- Harriman Lines (See separate companies)
- Harriman Medal Competition, 708, 1197
- Headlight (See Lighting)
- Hervey, D. F.: Locomotive Stoker, 385*
- Highway Crossing (See Grade Crossing)
- Hine, Major, 687
- Hocking Valley: Annual Report, 645†, 684
- Hoisting and Conveying:
 - Crane, Compensating Quadrant, 197*
 - Steam Shovel, Moving with Traction Engines, 782*
 - Traveler for Dismantling a Train Shed, 115*
 - Trucks, Electric, in Freight House Service, 236*
- Hose:
 - Air Brake Hose, 711*
 - Automatic Train Pipe Connector, 195*
- Hospital:
 - Harriman Medical Research Fund, 160
 - Hospital Associations, M. K. & T., 199
 - Hospital Car, C. R. I. & P., 748*
- Hostility (See Public, Railway's Relations with)

I

- Illinois & Iowa Demurrage Bureau: Cars Worth More Than Demurrage Money, 579
- Illinois Central:
 - Annual Report, 551†, 588
 - Educational Bureau, 63
 - Park, W. L., Address of, 520
 - Pictures on Watches of Employees Forbidden, 794
 - Reports, Daily Time, 503†, 506*
 - Safety First Meeting, 667
 - Weighing Bureau at Chicago, 527
- India:
 - Darjeeling Himalayan Railway, 327*
 - Development of the East Indian Railway, 172†, 191
 - Kalka-Simla Railway, 657*
 - Maintenance Work, Heavy, 989*
 - Indicators, Switch, 1113†
 - Indicators, Train, at Charing Cross, 1122*
 - Industrial Development by Railways (See Agriculture)

Injunction (See Legal Decisions)

Inspection Car (See Motor Car)

Interchange (See Car Service)

Intercolonial:

- Courtesy of Employees, 441†
- Discipline Without Suspension, 530
- Rules, Enforcing of, 714

International Congress of Refrigeration:

- Congress, Third, 567
- Facilities for Replenishing Ice for Refrigeration in Transit, 568
- Organization for Handling Refrigeration Transportation, 569
- Pre-Cooling Perishable Goods at Loading Stations, 568

International Railroad Master Blacksmiths' Association: Annual Convention, 357†, 369

International Railway General Foremen's Association:

- Annual Convention, 98, 151

Interstate Commerce Commission (See also Interstate Commerce Commission Rulings; also Commerce Court; also Legislation; also Legal Decisions):

- Accident Bulletin No. 46, 383; No. 47, 759
- Accident Report, Missouri Pacific at Brant, Mo., 270
- Accident Report, N. Y. N. H. & H. at North Haven, 461, 599†, 602†, 619
- Accident Report; N. Y. N. H. & H. at Stamford, 79†, 82†, 94, 125, 138†
- Accident Report, Pennsylvania Railroad at Tyrone, Pa., 494*
- Accounts, System of, 954
- Account Numbers for Filing Correspondence, 1117
- Annual Report, 1228
- Annual Report Forms, 808†
- Appointments, 809†
- Brandeis, Louis D.:
 - Appointed Attorney, 687†
 - Protests Against, 1039
- Car Shortage Circular, 798
- Clements, Judson C., Reappointed, 1239
- Decisions, Benefits of, 579
- Engineer, Need for, 744†
- Freight Rate, Advanced, Hearings (See Freight Rates; Advanced Freight Rate Hearings)
- Freight Claim Blanks Approved, 1239
- Hours of Service Law and Its Effect, 364†
- Investigations, Wasting Money on, 470
- Prouty, Commissioner, Lotos Club Address, 1149†
- Rail, Analysis of Broken, 623
- Revenues and Expenses for June, 392; August, 670; September, 883
- Statistics of Railways for the Year Ended June 30, 1912, 180
- Statistics for 1902 and 1912, 345, 650
- St. Louis & San Francisco Investigation, 1005†, 1038
- Telephone Companies Must Furnish Statements, 301
- Vacancies, 1005†

Interstate Commerce Commission Rulings (See also Commerce Court; also Legal Decisions; also Legislation):

- Apple Rates to Little Rock, 1240
- Automobile Rates to Portland, Ore., 1093
- Banana Rates Reduced, 31
- Barrel Stave Rates, 123
- Brick Rates from Ohio Points to Huntington, W. Va., 884
- Brick Rates to Huntington, 885
- Broom Rate Increased, 885
- Butter and Cheese Rates not Increased, 885
- Butter and Egg Rates not Increased, 164
- Car Distribution, 1092
- Cars not Misrouted, 1043
- Carrollton, Ga., Discriminated Against, 248
- Cement Rates, 1042
- Champagne Rates to California, 1092
- Chicago-Missouri River Class Rates Unreasonable, 244
- Chicago, Zeigler & Gulf, Joint Rate with, Canceled, 32
- Citrus Fruit Rates Reduced, 998
- Classification of Iron and Steel Window Frames and Sash, 1143
- Coal Rates Discriminatory, 124
- Coal Rates from Gallup, N. Mex., 1042
- Coal Rates not Increased, 885
- Coal Rates Reduced, 123, 839
- Columbia, S. C., Discriminated Against, 998
- Commodity and Class Rates from Pittsburgh, 125
- Commodity Rates Between Missouri River Points, 885
- Commodity Rates from Colorado East Reduced, 247
- Commodity Rates Increased, 798
- Conference Rulings, 31, 248
- Corn Milled at Oneonta, N. Y., 31
- Corn Rates to Wilmington, 1043
- Corrugated Iron Ratings, 1240
- Cotton Piece Goods Rates Reduced, 310
- Cotton Rates from Oklahoma to New Orleans, 1092
- Cotton Seed and Its Products, Rates on, 347
- Cotton, Through Export Bills of Lading on, 72
- Detroit-Missouri Charges, 1093

GENERAL INDEX—Continued.

[Illustrated articles are indicated thus*; Editorials thus†; Letters to Editor thus‡.]

Interstate Commerce Commission Rulings (Continued):

Discrimination in Car Distribution, 1203
 Douglas, Ga., Discriminated Against, 1043
 Duluth Discriminated Against, 164
 Express Rate Cases, 233
 Express Rate Modifications, 1042
 Fourth Section Application Granted, 349
 Free Return of Exhibits, 1093
 Georgia Towns Discriminated Against, 1043
 Government Losses in Oregon Short Line Through Route Case, 1204
 Grain Rates, 1043
 Grain Rates from Toledo, 124
 Grain Rates in Central Freight Association Territory, 1243
 Grain Rates not Increased, 1043
 Hay Rates Increased, 123
 Interurban Electric Lines, Joint Rates Over, 164
 Iowa Cities Case, 247
 Iowa Rates to Utah and Colorado Reduced, 247
 Iron and Steel Rates Reduced, 72
 Jersey City, N. J., Discriminated Against, 72
 Kansas-Iowa Brick Rates, 884
 LaGrange, Ga., Discriminated Against, 245
 Lighterage Charges, Chicago, 1043
 Lumber and Shingles, Reconsignment and Storage of, 72
 Lumber Rates, 1044
 Lumber Rates from Memphis and Other Points to New Orleans, 124
 Lumber Rates not Increased, 885, 1043
 Lumber Rates Reduced, 31
 Lumber Rates to Memphis, Tenn., 124
 Lumber Shipments, Reparation, 32
 Malting in Transit, 1093
 Manufacturers' Railway Case, 247, 306, 317†
 Massachusetts-Maine Wool Rates, 1240
 Meat Rates, Fresh, 1042
 Mileage Books, 885
 Milk Rates Reduced, 124
 Mississippi River Case, 247
 Missouri River-Illinois Wheat and Flour Rates, 32
 Montezuma, Rates to, Reduced, 839
 Nashville Coal Rates Reduced, 1243
 New Haven Commutation Fares, 1240
 New England Investigation, 73, 80†
 News Print Paper Rates not Reduced, 247
 New York Suburban Fares, 72
 Overcharges Collected, 1043
 Oyster Shipments from Baltimore, 431
 Paper Rates from Manitowoc and Milwaukee to Kaukauna, Wis., 885
 Passenger Fares, Special, Cannot be Reduced, 244
 Petroleum Products Rates Reduced, 72
 Pipe, Conduit, Rates, 1043
 Port Arthur, Tex., not Discriminated Against, 73
 Potato Rates Increased, 885
 Rate of Twenty-three Cents on Coffee Reasonable, 1093
 Rates from Meridian, Miss., 1092
 Rates on Beer from Dubuque, 1092
 Rates on Cereal from Belle Plaine, 1092
 Rates on Coal to Milwaukee and Other Wisconsin Points, 1240
 Refrigerating Charges not Increased, 885
 Reparation, 998
 St. Louis Rates Reduced, 164
 Salt Rates from Wisconsin to Iowa, 123
 Salt Rates not Changed, 206
 Scrap Iron Rates, 1043
 Sioux City not Discriminated Against, 124
 Spoke Rates Reduced, 32
 Springfield, Ill., Awarded 113 Per Cent. Group Rates, 1240
 Stone, Building, Rates, 839
 Storage Charges in Central Freight Association Territory, 998
 Tariffs, Charges for Copies of, 172†
 Telephone Service in Pittsburgh, Pa., 123
 Tin Cans and Fruit Baskets, Rates on, 349
 Tin Cans, Petroleum, and Other Commodities, 31
 Transcontinental Rates from Group F, 206
 Tub Rates Reduced, 431
 Unused Transit Privileges, 1092
 Vegetable Rates Reduced, 885
 Vienna, Ga., Discriminated Against, 247
 Volco, Fifth Class, 839
 Washington, D. C., Discriminated Against, 31
 Washington Western, Joint Rates with, 124
 Weighing, Cane, 248
 Weighing, Charges, 1092
 Wheat Rates from Chicago and Minneapolis, 125
 Wheat Rates Reduced, 164
 Investment (See Finance)
 Iron and Steel (See also Rail; also Wheel; also Welding; also American Society for Testing Materials):
 Ingot Iron, 112*
 Manganese Steel, 518
 Manganese Steel Rails, Specifications for, 291

K

Kansas City Southern: Case Before the Supreme Court, 1093, 1107†
 Kansas & Southwestern:
 Passenger Fare Increase, 206
 Three-Cent Fare Asked, 160
 Valuation Committee, 469
 Kilbourne & Jacobs Manufacturing Company:
 Dump Car, Automatic Air, —
 Kolesch & Co.: Fulton Pocket Target, 1194*

L

Labor (See Employee)
 Lake Shore & Michigan Southern:
 Consolidation with New York Central, Proposed, 41†
 Reclaiming Timber with a Resawing Machine, 105
 Smoke Washing Plant at Englewood, 1022*
 Lamp (See Lighting)
 Legal Decisions (See also Interstate Commerce Commission Rulings; also State Commission Rulings; also Legislation; also subjects; also Commerce Court):
 Air Brakes in Switching, 1093
 Brakes for New York Street Cars, 125
 Bribery, Fine for, 886
 Classification, False, Fine for, 839, 881
 Compensation Fund and Damages, 165
 Conciliation Committee Proposed, 5†
 Damages Paid Twice, 1044
 Defrauding Railways, Fines for, 430
 D. L. & W. Fined for Violation of Commodities Clause, 1093
 False Classification of Freight, 1244
 Freight Claim Frauds Punished, 244
 Full Crew Laws of Pennsylvania Sustained, 33
 Headlight Law of Illinois, Injunction Against, 33
 Hours of Service Law Fines, 249
 Indiana Freight Rate Reduction, 886
 Iowa Passenger Fare Law Enjoined, 249
 Kansas City Southern Case, 1093, 1107†
 Lemon Rates Sustained, 886, 936
 Lighterage in New York Harbor, 1093
 Mileage Tickets in Georgia, 1096
 Minnesota Rate Case, 89, 133†, 139†, 200, 430
 Nebraska Rate Case, 808†
 Oregon Rate Law Declared Invalid, 672
 Overcharges Refunded in Oklahoma, 924
 Passenger Fares in Alabama, 583
 Passenger Fares in Pennsylvania, 582
 Passes, Fines for Receiving, 719, 800
 Passes in New Jersey, 886
 Robber Sentenced, 118
 Sleeping on Duty, Imprisonment for, 470
 Southern Pacific Land Case, 73
 Tap Line Order Overruled, 1096
 Theft, Sentence for, 926
 Weeds and Damage to Lands, 936
 Legislation (See also Government Regulation; also Commerce Court; also Interstate Commerce Commission; also Interstate Commerce Commission Rulings; also State Commission Rulings):
 Arbitration Law, New, 81†
 Conciliation Committee Proposed, 5†
 Congress and Crude Bills, 639†
 Difficulties in Neighboring States, 2†
 Effect of Massachusetts Law Regulating Security Issues, 1150†
 Full Crew Law and Mr. Sulzer, 256†
 Grade Crossing Abolition Requirements, 1109†, 1118
 Hasty Legislation, Plea Against, 449
 Hours of Service Law and Its Effect, 364†
 Hours of Service Law in Massachusetts, 40†
 Illinois Public Utilities Law, 88
 Investigations, Wasting Money on, 470
 Liquor, Sale of, on Ohio Trains, 714
 Maine Railroad Laws, 61, 118
 Operation, Legislation Relating to, 256†, 270, 277†
 Passes in Illinois, 1036
 Preventing Harmful Legislation, 315†
 Public Service Law in Pennsylvania, 238, 359†, 379
 Seamen, Number of, 991
 Surprise Tests Abolished in Kansas, 4†
 Train Crew Legislation, Analysis of, 750
 Train Crew Legislation, Opposition to, 343
 Wages, Time and Payment of, 871
 Working Hours for Women, 343
 Lehigh Valley:
 Accident near Slatington, Pa., 200
 Annual Report, 484†, 545
 Bridge Inspection Methods, 968†, 969
 Employees' Relief, 628
 Locomotive Record, 704*
 Newark Bay Trestles Rebuilt in Twelve Days, 24
 Passengers, Courtesy to, 27
 Refrigerating Barges, 1039
 Lignite Coal Testing Plant, 1121

Lighting (See also Association of Railway Electrical Engineers):
 Axle Lighting System, Constant Voltage, 923*
 Deflectable Headlight, 645†*
 Indirect Lighting, Unsatisfactory, 926
 Searchlight on Observation Cars, 160
 Spheroidal Lens, Armspear, 502*, 795
 Link Side Bearing Co.: Link Side Bearing Truck, 1167*
 Liquor (See Employee; also Legislation)
 Locomotive:
 Axles (See Wheel)
 Bearings (See Bearings)
 Boiler Inspection Report of Chief Inspector, 1209†, 1233
 Cab Window Ventilator, 1128*
 Diesel Locomotive, 697*
 Engine Failures, 255†
 Export of British and American Locomotives, 572
 Firing (See Fuel)
 Fuel (See Fuel)
 Gas-Electric, Dan Patch Lines, 916*
 Headlights (See Lighting)
 Inspection Locomotive, Atlantic Type, 404*
 Pacific Type Locomotives, C. & O., 571*
 Powerful Locomotives, Northern Pacific, 377*
 Progress of Design in 1913, 1209†, 1215
 Superheater Locomotives, 96
 Tractive Effort, 455*
 Trucks (See Trucks)
 Valve (See Valve)
 Young Superheater, 1169*
 Locomotive Boiler (See also Master Boiler Makers' Association):
 Circulation, 364†
 Explosion, Southern Pacific, 159
 Studs, Thread and Taper for Boiler, 178
 Tube Specifications, 174†
 Locomotive (Electric): Articulated Electric Locomotives; N. Y. C. & H. R., 868*
 Locomotive Firebox:
 Brick Arch, Advantages of, 335
 Circulation in Firebox Water Legs, 174†
 Hervey Locomotive Stoker, 385*
 Life of Locomotive Fireboxes, 91*, 364†
 Mechanical Stokers and Smoke Prevention, 25
 Standard Locomotive Stoker, 639†, 647*
 Locomotive (Freight): Northern Pacific; Powerful Locomotives, 377*
 Locomotive Performance:
 Atlantic Type Locomotive Record, Pennsylvania Railroad, 470
 Engine Failures, 255†
 Grades and Locomotive Performance, 55*
 Locomotive Record, Lehigh Valley, 704*
 Overloading Freight Locomotives not Economical, 915
 Tractive Effort, 455*
 Train of 99 Cars Hauled 111 Miles by One Locomotive, 270
 Long Island Railroad:
 Criticisms Invited, 670
 Electrification, 794
 Jamaica Improvements, 183*, 508*
 Lookout, Keeping a Perfect, 898†, 901, 1006†, 1009
 Louisville & Nashville: Improvements, 143*, 225*
 Lumber (See Ties and Timber)

M

Machine Tools:
 Press, Hydraulic Forging and Bending, 665*
 Rail Anchor Testing Machine, 509*
 Mail:
 Electric Carrier System, 624*
 Fifty Pound Parcels by Mail, 1107†
 Jones' Mail Catcher, 758*
 Parcel Post and Express Business, 996
 Parcel Post Record Shipment, 420
 Railway Mail Pay, 200, 241, 326, 344, 794, 1107†, 1138, 1236
 Railway Mail Service, 1239
 Trains and Late Mails, 835
 Twenty-Pound Parcels by Mail, 161, 344
 Unprofitable Contract, T. St. L. & W., 241
 Maintenance of Way (See also Rail; also Ties and Timber; also Accounting; also Hoisting and Conveying; also American Railway Engineering Association):
 Accident Due to Defective Maintenance, 967†
 Accidents, Methods of Reducing, 978
 Accidents, Personal and Otherwise, Viewed from a Maintenance Standpoint, 515
 Appliances, New, 518
 Appliances, Power Driven and Labor Saving, 519
 Ballast (See Ballast)
 Ballast Car, Repairing, 990
 Bridge Building Organization, 116
 Bridge Inspection Methods, 968†, 969*
 Bridge Replacing, C. of N. J., 699*
 Caving Down Banks Ahead of a Steam Shovel, 510*
 Cinders, Valueless, 99†
 College Man and Maintenance Work, 99†

Maintenance of Way (Continued):

- Construction Organization, C. B. & Q., 111
- Contracting Maintenance Work, 503†, 770†, 516
- Cost of Construction Work, 1172†
- Deraillments, Responsibility for Minor, 1176
- Drains and Sewers, 786
- Earthwork, Method of Handling Light, 287*
- Equipment, Small, and Maintenance Work, 99†
- Fiscal Year and Maintenance Work, 100†
- Flood (See also Flood)
- Flood Reconstruction; B. & O., 99†, 106*
- Flood Reconstruction; Chic., Ind. & Louis., 99†, 110*
- Foundation Failure, 986*
- India, Heavy Maintenance Work, 989*
- Labor Holding, 503†, 769†, 771, 979
- Labor Problems, Track, 769†
- Labor, Track, Economics of, 521
- Material, Selection of, by Men on the Ground, 1172†
- Motor Car for Inspection Purposes, 523*
- Motor Cars for Maintenance of Way Forces, 100†, 101, 519
- Organization of Maintenance Forces, Combined, 517
- Prizes for Track Maintenance; Pennsylvania Railroad, 780
- Rails and Fastenings, Second Hand, Handling on Branch Lines, 299
- Raising Relocated Panama Railroad, 981
- Reclaiming Maintenance Scrap, 260†, 278
- Reports, Daily Time and Material, 503†, 505*
- Safety Suggestions, 1185
- Section Forces, Ordinary Comforts for, 1192*
- Scoop Car for Removing Slides, 987*
- Section Car (See Motor Car)
- Shifting a Long Section of Track, 782*
- Snow Fences, 790
- Snow, Preparation for, 967†
- Structures, Temporary, for Supporting Tracks, 787
- Tanks, Wooden, Repaired with Concrete, 981
- Track Inspection on the N. Y. C. & H. R., 1192
- Tie Plates, 518
- Track Layer, Three Men, 525*
- Work Trains (See Competition)
- Year of Decided Contrast, 1171†
- Maintenance of Way Master Painters' Association:
 - Annual Convention, 983, 1179
 - Advertising Value of Railroad Painting, 983
 - Bridge Painting Difficulties, 982
 - Bridge Paint Tests, 1179
 - Concrete Surfaces, Treatment of, 984
 - Contracting of Railroad Painting, 983
 - Paints and Oils, Safe Storage of, 1181
 - Red Lead, New Department in, 984
 - Workmen's Compensation Legislation, 1180
- Manistique & Lake Superior: Department of Development, 715
- Manufacturers' Railway of St. Louis: Case Before the Interstate Commerce Commission, 247, 306, 317†, 527, 633
- Mark Manufacturing Company: Steel Unions, 98*
- Maschinenfabrik Buckau: Track Shifter, 294*
- Master Car & Locomotive Painters' Association:
 - Annual Convention, 495
 - Economy in Locomotive Painting, 496
 - Enameled Interior Trimmings, 498
 - Maintenance of Passenger Cars, 498
 - Paint Protection for Steel Equipment, 497
 - Paint Shop Supplies, 498
 - Rust Inhibitive Paint, 496
 - Steel Passenger Cars, Finishing, 495
 - Test Committee's Report, 495
- McCord & Company: Steel Journal Box, 966*
- Mellen, Charles S.:
 - Dinner of B. & M. Employees, 1088
 - Position, 65
 - Responsibility for the New Haven's Troubles, 1151†
 - Resignation, 133†
 - Retained in Advisory Capacity, 426
 - Statement, 918
- Merchants' Association of New York: Benefits of Interstate Commerce Commission's Decisions, 579
- Mexico: Wartime Railroad, 702
- Mileage:
 - Statistics for 1912, 180
 - Longest Railways in the World in 1864, 172†
- Minneapolis, St. Paul & Sault Ste. Marie:
 - Annual Report, 812†*, 849
 - Chicago Freight Terminal, 321*
- Minneapolis, St. Paul, Rochester & Dubuque Electric Traction: Gas-Electric Locomotive, 916*
- Missouri, Kansas & Texas:
 - Annual Report, 1057†*, 1104
 - Burning Earth for Ballast, 343
 - Construction Work Stopped, 240
 - Deflectable Headlight, 645†*
 - Hospital Associations, 199
 - Locomotives with Fire Extinguishers, 628
 - Train Auditors, 1137
- Missionary's View of Railroads, 855†
- Missouri Pacific:
 - Accident at Brant, Mo., 270
 - Annual Report, 689†*, 737
 - Bridge Inspection Methods, 968†, 972

Missouri Pacific (Continued):

- Kaw River Bridge Reconstruction, 45*
- Valuation Committees, 879
- Mobile & Ohio: Accident at State Line, Miss., 795
- Moment of Inertia, Finding, 381*, 413
- Motor Car:
 - Electric Trucks in Freight House Service, 236*, 1153*
 - Inspection Motor Car, Narrow Gauge, 523*
 - Motor Cars for Bridge Gangs, 786
 - Motor Cars for Maintenance of Way Forces, 100†, 101, 519
 - Motor Car Troubles, Their Symptoms, Causes and Remedies, 298
- Mudge & Company: Inspection Motor Car, Narrow Gauge, 523*

N

- National Association of Railway Commissioners:
 - Annual Convention, 807†, 831, 869
 - Safety Report, 925
 - Valuation Committees Appointed, 1085
- National Civic Federation: Social Progress Investigation, 964
- National Industrial Traffic League: Annual Meeting, 962
- National Railway Appliances Association (See American Railway Engineering Association)
- National Railway Devices Co.: Coupler Release Rigging, 1168*
- National Railways of Mexico:
 - Annual Report, 1211†*
 - High Cantilever Bridge Across Rio Chico, 1222*
- National Transcontinental Railway: Construction Cost, 992
- Newspapers and the Railways, 1154†
- New York Central & Hudson River:
 - Annual Track Inspection, 1192
 - Apprentice Instructors, Conference of, 639†
 - Bridge Inspection Methods, 968†, 971
 - Electric Locomotive, Articulated, 868*
 - Lake Shore & Michigan Southern Consolidation, Proposed, 41†
 - New York, West Shore & Buffalo Anniversary, 119
 - Reports, Daily Time and Material, 503†, 505*
 - Rome, N. Y., Improvements, 282*
 - Safety Exhibit Car, 213†, 228*
 - Safety First Meeting, 1085
 - Trespassers, 255†, 267*, 575, 640†
- New York, New Haven & Hartford:
 - Accident at North Haven, 397†, 427, 441†, 442†, 461, 471, 482†, 575, 577, 599†, 602†, 619, 622, 628, 630
 - Accident at Stamford, 79†, 82†, 94, 125, 138†, 161
 - Accidents, Train and Automobile, 27
 - Annual Report, 944†*
 - Automatic Stop Prize, 64
 - Beautifying the Line, 161
 - Boston & Providence, Life on, 426
 - Car Floats, Steel, 533
 - Causes of the Troubles, 1151†
 - Dividend Passed, 1138
 - Doherty, Engineman, Released, 240
 - Elliott, Howard, and New England, 615
 - Elliott, Howard, Outline of Plans, 471
 - Elliott, Howard, to New Haven Stockholders, 387
 - Enginemen and Firemen, Selection of, 119, 528, 598†, 641†, 687†, 794, 834
 - Fish Wharf at South Boston, 575
 - Grade Crossing Abolition, 241, 387
 - Hadley, Dr. A. T., Elected a Director, 549†
 - Interstate Commerce Commission Report on the New England Situation, 72, 80†
 - Managers, Character of, Past and Present, 258†
 - Mellen, C. S., Dinner of B. & M. Employees, 1088
 - Mellen, C. S., Position of, 65
 - Mellen, C. S., Resignation, 133†
 - Mellen, C. S., Responsibility for the New Haven's Troubles, 1151†
 - Mellen, C. S., Retained in Advisory Capacity, 426
 - Mellen, C. S., Statement of, 918
 - Morgan, J. P., & Co., Relations with, 443†
 - Rhode Island, Interests in, 879
 - Salutatory of Officers, 565
 - Slower Trains, 666
 - Summer Passenger Business, 160
 - Superheaters for Locomotives, 161
 - Ties Laid in 1913, 343
 - Traffic at South Station, Boston, 576
 - Westerly, R. L., Station, 301
- New York Railroad Club: Future of, 1007†
- New York Subway (See Subway)
- Norfolk & Western:
 - Bridge at Kenova, W. Va., 400†, 407*
 - Electrification, 241, 387
 - Scoop Car for Removing Slides, 987*
- Northern Pacific:
 - Abandons Form 31, 1054†
 - Angle Iron Clips for Bridge Stringers, 781*
 - Locomotives, Powerful, 377*
 - Safety First, 1196
 - Tipping Prohibited, 807†, 834
- North Western University School of Commerce, 426
- Nut, Absolute Lock, 1194

O

- Officer (See also Education; also Organization; also Public, the Railway's Relation with; also Employee):
 - Accidents and Officers, 482†, 743†
 - Character of Managers, Past and Present, 258†
 - College Man and the Railroads, 49, 99†, 851†
 - Co-operation Between Railroads, Needed, 856
 - Salutatory of Officers, N. Y. N. H. & H., 565
 - Train Despatcher and the Block System, 258†
- Ohio Storm, 993
- Oil (See Fuel; also Lubrication)
- Operating Efficiency:
 - Co-operation Between Railroads, Needed, 856
 - Day's Train Record Over Tehachapi Mountain, 155*
 - Gettysburg Anniversary Traffic, 214†, 223*, 343
 - Freight Car Loading, Increasing, 810†, 830
 - Freight Car Movement, Increasing, 175, 363†, 371, 399†, 403, 549†, 555, 579, 597†, 602†, 646, 992
 - Train Operation Sixty Years Ago, 339*
- Operating Studies:
 - Chesapeake & Ohio, 1053†, 1061*
 - Chicago, Burlington & Quincy, 85*
- Oregon-Washington Railroad & Navigation Company:
 - Accident Due to Defective Maintenance, 967†
 - Terminal at Spokane, Wash., 817*
- Orenstein-Arthur Koppel Company: Quarry Car, 510*
- Oregon Short Line: New Coaling Stations, 1178*
- Organization (See also Officers; also Maintenance of Way):
 - Bridge Building Organization, 116
 - Conciliation Committee Proposed, 5†
 - Construction Organization; C. B. & Q., 111
 - Divisional, Discontinued on Big Four, 1135
 - Efficient Organization Suggestions, 216†*
 - Engine House, 153*
 - Hine System, Office Building for, 827*
 - Refrigeration Organization, 569
 - Reports, Daily Time and Material, 503†, 505*
 - Station Work, 52
- Ownership (See Finance; also Government Ownership)
- Pacific Electric Railway: Accident near Los Angeles, Cal., 119
- Pacific Fruit Express: Ice Manufacturing Plant, 63
- Paint (See also Maintenance of Way Master Painters' Association; also Master Car and Locomotive Painters' Association):
 - Bridge Paint Tests, 1179
 - Fire Resisting Paint Tests, 293*
 - Safe Storage of Oils and Paints, 1181
 - Whitewashing Device with Portable Compressor, 292*
- Panama Canal (See Waterways)
- Panama, Isthmus of, Traffic over, 30
- Panama-Pacific Exposition Railway, 794
- Panama Railroad:
 - Accident at Paraiso, 926
 - Raising Relocated Road, 981
 - Alabama, 473
 - Cost and Efficiency, 39†, 58, 137†
 - Increased Passenger Fares Asked for by Passengers, 160
 - Iowa Passenger Fare Law Enjoined, 249
 - Minnesota Rate Decision and Passenger Fares, 68, 133†
 - Regulation of Passenger Fares, 1220
 - Two-Cent Fares and Mileage Books, 121
 - Two-Cent Fares in Missouri, 68
 - Two-Cent Fares in Oklahoma, 68
- Passenger Fare Increase:
 - Chicago Great Western, 203
 - Kansas & Southwestern, 206
- Passenger Fare Reduction (See also Interstate Commerce Commission Rulings; also State Commission Rulings):
 - Alabama, 669
 - Chesapeake & Ohio, 243, 473
 - Chicago Great Western, 243*
 - Dakota, 797
 - Louisville & Nashville, 304
 - Maine Central, 390
 - Missouri, 536
 - Rates for Mileage, 1210†
 - Regulation, 1220
 - Southern Pacific, 717
 - Wichita Falls & Northwestern, 672
- Passenger Service:
 - Dining Car Service, Canadian Pacific, 470
 - English Trains, American Impression of, 197
 - Fast Passenger Service, 214†
 - Gettysburg Anniversary Traffic, 214†, 223*

GENERAL INDEX—Continued.

[Illustrated articles are indicated thus*; Editorials thus†; Letters to Editor thus‡.]

Passenger Service (Continued):
 Silence for Sleepers, 358†
 Tipping Prohibited, 807†, 834
 Tourist Sleeping Cars, 430
 Passes (See also Legislation; also Interstate Commerce Commission Rulings; also Employee):
 Legislative Retaliation Threatened; C. B. & Q., 1053†, 1087
 Railroad Men in the North Carolina Legislature, 667
 Pay (See Employee)
 Pennsylvania Railroad:
 Accident Committees, 714
 Accident at Tyrone, Pa., 201, 494*
 Accident near Wileys, Ohio, 575
 Accident Record, 26
 Agricultural Demonstration Train, 1140
 Atlantic Type Locomotive, Record of, 470
 Bridge Inspection Methods, 968†, 973
 Business Cars, 628
 Dairy, Model, 342*
 Dynamite, Buildings for, 386
 Electrification at Philadelphia, 577
 Employees' Homes, 942†
 Equipment not to be Burned After Accident, 714
 Firemen and Enginemen, Rules for Promotion of, 528
 Free Delivery in Washington and Baltimore Abolished, 163
 Lunch Counter Car, 1086
 Merits and Demerits for Employees, 171†, 201
 Newark Bay Trestles Rebuilt in Twelve Days, 24
 Pensions, 344, 469
 Prizes for Track Maintenance, 780
 Recommendation Letter Forgeries, 833
 Rescue of Passengers from a Flood, 345
 Safety at Grade Crossings, 527
 Safety First, 343, 879
 Safety First Exhibition, 614
 Schuylkill River Bridge Improvements, 1173*
 Signaling Conditions, 625
 Surprise Checking, 715
 Ticket Abuses, 881
 Ticket Redemption, 304
 Traffic over the Middle Division, 68
 Valuation Committee, 27
 Pension (See Employee)
 Philadelphia & Reading:
 Gettysburg Anniversary Traffic, 214†, 223*
 Inspection Locomotive, Atlantic Type, 404*
 Pittsburgh & Lake Erie: Standard Track Scale, 103*
 Pneumatic Tools (See Machine Tools)
 Portland, Eugene & Eastern: Construction, 453*
 Power Specialty Co.: Young Locomotive Superheater, 1169*
 Prussian-Hessian State Railways:
 Diesel Locomotive, 697*
 Congestion in 1912, 1209†, 1232
 Public, The Railways' Relations with (See also Finance):
 Advertising, Texas Railways Criticised for, 171†
 Character of Managers, Past and Present, 258†
 Cox, Governor James, Railway Business Association Address, 1115
 Criticisms, 363†
 Criticisms Invited, 670
 Discourtesies, College Man to Detect, 1†, 84†
 Elliott, Howard, Railway Business Association Address, 1115
 Employee and the Railway Patron, 1065
 Good Service, Recognition of, 214
 Legislative Retaliation Threatened for Refusal to Issue Passes, 1053†, 1087
 Low, Seth, on the Railroad Problem, 1197
 Magazines and Government Ownership, 688†
 Newspapers and the Railways, 1154†
 New York, New Haven & Hartford Troubles, 1151†
 Passengers, Courtesy to, 27
 Publicity Departments, 90
 Publicity to Accidents and Delays, 740†
 Railroad Aided by People, 160, 206
 Railways' Interest in Better Farming, 1006†
 Regulation of Passenger Fares, 1220
 Shippers, Treatment of, 345
 Situation, The Railway, 767
 Telephones in Ticket Offices, 214†, 325
 Van Horne's, Sir William, Views, 1086
 Publicity Departments, 90
 Pullman Company:
 Advance Reservations, 203
 Can Pullman Employees Co-operate to Improve the Service? 1154†
 Erd Construction for Pullman Cars, New, 231*
 Low Berth Rates, 632
 Pump (See Water Service)
 Purchases, Railway, and General Prosperity, 1149†, 1161*

Q

Queen & Crescent:
 Automatic Train Pipe Connector, 195*
 Rail Anchor Testing Machine, 509*

R

Rail (See Maintenance of Way):
 Anchor Testing Machine, 509*
 Branding and Heat Number Stamping of Steel Rails, 1189*
 Broken Rail, Analysis of, 623
 Canadian Rail Production in 1912, 388
 Cutting, Economy in, 1191
 Manganese Steel Rails, Specifications for, 291
 Ninety-Pound Rail, Denver & Rio Grande, 774*
 Second Hand Rails, Handling, 299
 Statistics of Failed Rails, 529
 Seams, 1082
 Taper Rail, 1194*
 Three Man Track Layer, 525*
 Transverse Fissures Due to Overloading, 1108†
 Transverse Fissures Studied by New York Public Service Commission, 1182
 Railway Business Association:
 Annual Meeting, 1115
 Railway Buying and General Prosperity, 1149†, 1161*
 Railway Incomes, 492
 Railway Buying and General Prosperity, 1149†, 1161*
 Railway Club of Pittsburgh: Air Brakes and Modern Conditions, 415
 Railway Commissions (See State Commissions)
 Railway Electrical Engineers' Association: Annual Convention, 831
 Railway Fire Protection Association: Convention, 705
 Railway Signal Association:
 Annual Meeting, 742†, 760
 Treated Ties and Track Circuits, 780
 Railroad Smoke Inspectors' Association of Chicago: Smoke Problem in Chicago, 239
 Rebates (See Legal Decisions)
 Refrigeration (See also International Congress of Refrigeration):
 Barges, Refrigeration, 1039
 Reinforced Concrete (See Concrete)
 Reports, Annual (See names of companies)
 Rice Gasoline Rock Drill Company: Gasolene Rock Drill, 780*
 River (See Waterways)
 Road Building (See Agriculture)
 Roadbed (See Maintenance of Way)
 Roadmasters' and Maintenance of Way Association: Accidents, Personal and Otherwise Viewed from a Maintenance Standpoint, 515
 Annual Convention, 277†, 503†, 515
 Appliances, New, 518
 Contracting Maintenance Work, 503†, 516, 770†
 Economies of Track Labor, 521
 Organization of Maintenance Forced, Combined, 517
 Park, W. L., Address of, 503†, 520
 Power Driven and Labor Saving Appliances, 519
 Track Supply Association, 523
 Robber (See Train Robberies)
 Rochester & Eastern: Accident at Victor, N. Y., 198
 Rock Island Lines: Pass Form, New, 275*
 Rosen-Baum, E. Raven: Welding and Cutting with Oxygen and Illuminating Gas, 196*
 Rumsey Car Door & Equipment Company: Mail Car Door, 240*
 Rules: Is Standard Code Rule 20 Safe? 1114†

S

Safeguards (See Safety Appliances)
 Safety (See Accident; also Maintenance of Way; also Safety First)
 Safety Appliances:
 Automatic Stops (See Signaling)
 U. S. Safety Appliances Required in Canada, 119
 Safety Committees (See Accident; also Safety First)
 Safety First (See also Accident)
 B. & O. Safety First Clock, 576
 B. & O. Safety Work, 301
 Chicago & North Western Safety First Results, 160, 992
 Convention at Chicago, 564
 D. L. & W. Safety Results, 387
 Demands More Than Words, 1111†
 Erie, Safety First, 388
 Erie Safety Record, 304
 Expression, Modes of, 1150†
 Grand Trunk Safety First Campaign, 387, 834, 879
 Harriman Medal Competition, 708
 Harriman Safety Medal Presented to Southern Pacific, 1197

Safety First (Continued):

Illinois Central Safety First Meeting, 667
 National Association of Railway Commissioners, Safety Report, 925
 N. Y. C. & H. R. Safety Exhibit Car, 213†, 228*
 N. Y. C. & H. R. Safety Meeting, 1085
 Northern Pacific, 1196
 Origin of Safety Movement, 743†
 Pennsylvania Railroad, Safety Campaign, 343, 879, 1086, 1196
 Pennsylvania Railroad Safety First Exhibition, 614
 Railway Clubs and Safety First, 529
 St. L. & S. F. Safety First Swimming Pool, 470*
 St. L. & S. F. Safety Record, 749
 St. L. & S. F. Safety Work, 201, 301
 San Pedro, Los Angeles & Salt Lake Safety Efficiency Committee, 878
 Southern Pacific, Safety First Campaign, 576
 Western Maryland Safety First, 965
 St. Louis & San Francisco:
 Convertible Stock and Box Car, 1126*
 Farm Marketing to Be Developed, 1140
 Fuel Economy, 874*
 Passenger Train Service Reduction, 243
 President Winchell's Farewell, 160
 Proper Loading of Coal Cars, 1083*
 Receivership Investigation, 1005†, 1038
 Safety Record, 749
 Safety First Swimming Pool, 470*
 Safety First Work, 201, 301
 Statement of B. F. Yoakum, 1197, 1210†
 Steel Frame Box Cars, 598†, 609*
 St. Louis Southwestern:
 Annual Report, 641†, 685
 Freight Terminal at St. Louis, 218*
 Salary (See Officer)
 Sanitation:
 Drinking Water, 834
 Drinking Water, Pure; Southern Pacific, 820
 Governmental Sanitary Inspection, 344
 San Pedro, Los Angeles & Salt Lake: Safety and Efficiency Committee, 878
 Scale:
 Scale Shops, 300
 Scale Test Car, U. S. Bureau of Standards, 114, 985*
 Standard Track Scale of the P. & L. E., 103*
 Schedule: Make Up Time, 1035*
 School (See Education)
 Scientific Management (See Efficiency Methods)
 Screw Spikes (See Maintenance of Way)
 Seaboard Air Line: Annual Report, 1056†, 1102
 Section Car (See Motor Car)
 See America First, 1040
 Sellers, Wm., & Company: Safety Squirt for Sprinkling Coal, 664*
 Shippers (See Car Service; also Public, Railways' Relations with)
 Shops (See also Efficiency Methods):
 Engine Terminals, Western Maryland, 189*
 Engine House Pay, 446†
 Foundry, Brass, Iron and Steel, 467*
 Frog and Switch Shops, D. L. & W., 975*
 Inefficiency of Railroad Shops, 740†
 Sacramento Shops, Western Pacific, 564*
 Scale Shops, 300
 Scrap Reclaiming, A. T. & S. F., 260*, 278†, 739†
 Shop Output, 1005†, 1018
 Signal Accessories Company: Triplelock Switch Machine, 781*
 Signal, Block (See also Railway Signal Association):
 Automatic Block Signal Details, 760
 Automatic Block Signal Records, Reliability of, 6†
 Manual Block Signaling, Estimates of Costs, 761
 Overlap, 1060†
 Records, Reliability of, 6†
 Train Despatcher and the Block System, 258†
 Space Interval System and Inadequate Signals, 173†*
 Signaling (See also Railway Signal Association; also American Railway Engineering Association):
 Accident at Shepherd's Bush, 1150†
 Adjunctive Safeguards, 689†
 Automatic Stops and Audible Signals, 663
 Automatic Train Stop, "Railophone," 1085
 Automatic Train Stop, Gray-Thurber, 833
 Automobile Accidents and White Flags, 576
 Automatic Stop Prize; N. Y. N. H. & H., 64
 Boston & Maine Recommended to Abolish Ball Signals, 1108†
 Disk Signals, Enclosed, 397†
 Enginemen Annoyed by Automobile Lights, 1210
 Flagging Rule and Its Enforcement, 695
 Gettysburg Signal Installation, 223*
 Interlocking Signals in Illinois and Wisconsin, 1037
 Instruction on C. & N. W., 1236
 Maintainer, Signal, 2†

Signaling (Continued):

- Signaling Conditions on the Pennsylvania, 625
- Space Interval System and Inadequate Signals, 173†
- Stamford Collision and Signals, 79†, 82†, 94, 125, 138†
- Surprise Tests Abolished in Kansas, 4†
- Switch Indicators, 742†, 761, 1113†
- Treated Ties and Track Circuits, 780

Smoke Prevention (See Fuel)

Snow (See Maintenance of Way)

Society for the Promotion of Engineering Education: College Man and the Railroads, 49, 99†

Society of Railway Financial Officers:

- Annual Meeting, 605
- Aspects of Railway Regulation, 659
- Cash Book Systems, 606
- Clearing House Settlements, 605
- Drafts, Payment of, 605
- Pay Laws, Semi-Monthly, 606
- Security Market Conditions, 607
- Vouchers, Forms of, 605

Southern New England (See Grand Trunk)

Southern Pacific:

- Automobile Accidents at Railroad Crossings, 64
- Boiler Explosion, 159
- Boiler Tubes, Old, Used Again, 63
- Bridge Inspection Methods, 968†, 973
- Car Distribution Rules, 1086
- Dining Car Service, 1036
- Dissolution Plan Approved, 12
- Drinking Water, 820
- Harriman Medical Research Fund, 160
- Land Forfeits, 73
- Providing Ordinary Comforts for the Section Foreman, 1192*
- Receives Harriman Safety Medal, 1197
- Safety First Campaign, 576
- Scholarships, 878
- Strike on Sunset Lines, 926, 942†, 959, 1085
- Tehachapi Mountain, Day's Train Record Over, 155*
- Tehachapi Pass Electrification, 441†, 447*
- Telegraphers, Agreement with, 527
- Troubles with Employees on Electric Lines, 343, 357, 387

Southern Railway:

- Annual Report, 692†, 729
- Boll Weevil, War Against, 142

Speed: Speed Diagram, 1035*

Spike (See Maintenance of Way)

Standard Steel Works Company: Drop Test of Heat Treated Chrome Vanadium Wheels, 573*

Standard Stoker Company: Standard Locomotive Stoker, 639†, 647*

State Commissions (See also State Commissions' Rulings):

- Advertising, Texas Railways Criticised for, 171†
- Alabama: Platform of a Commissioner, 629
- Appointments, Injudicious, 39†
- Canada (See Canada)
- Connecticut: Accident Report, N. Y. N. H. & H. at North Haven, 577, 622
- Connecticut: Accident Report, Stamford Collision, 125
- Grade Crossing Abolition Requirements, 1109†, 1118
- Illinois Public Utilities Commission, 33, 88
- Illinois: Rules, General Revision of, 206
- Indiana: Block Signal Investigation, 475
- Maine: Public Utilities Act, Date of Decision of, 310
- Maine Public Utilities Commission Proposed, 61, 118
- Massachusetts: Signaling on the Boston & Maine, 1044
- Massachusetts: Personnel of Commission, 125
- Minnesota: New Tariffs, 886
- Missouri: Cost of Litigation, 163
- Missouri: Personnel of Commission, 392
- Money Needed for Litigation, 206
- Nebraska: E. C. Hurd Resigned, 1093
- New Mexico: Express Rate Reductions, 719
- New York: Authority of Stages, 125
- New York: Personnel of Commission, 125
- New York Public Service Commission Studying Transverse Fissures in Rails, 1182
- North Carolina: Rate Commission, 1039
- Pennsylvania: New Appointments, 310
- Pennsylvania: Public Service Commission Created, 238, 359†, 379
- Screen Regulation Difficulties, 2†
- Valuation, Aid in, 26
- Wisconsin: Interlocking Plants, 800

State Commission Rulings:

- Alabama: Passenger Fares, 349
- California: Authority over Steamships, 125†
- California: Drinking Cups, 839
- California: Express Rates Reduced, 244
- California: Weight Basis, 672
- California: Rates on Sierra R. R., 1244
- Canada (See Canada)
- Illinois: Long and Short Haul Ruling, 73
- Illinois: Switching Rates, 672
- Kansas: Kansas & Southwestern Passenger Fare Increase, 206
- Kansas: Surprise Tests Abolished, 4†

State Commission Rulings (Continued):

- Louisiana: Block Signaling Ordered, 1143
- Flagging Rule Fines, 1000
- Script Substituted for Mileage, 1204
- Uniform Class Mileage Rates, 1143
- Massachusetts: Interlocking Signals on B. & M., 1108†
- Mississippi: Syrup Rates Reduced, 1204
- Missouri: Cash Fares, 536
- Missouri: Fares, 29
- Missouri: Two-Cent Passenger Fares, 125
- Missouri: Valuation Reports Required, 886
- Nebraska: Apple Rates Reduced, 633
- New Jersey: Bond Sales Restrictions, 839
- New Jersey: Drinking Water on Trains, 349
- New Jersey: Freight Rate Increase Forbidden, 392
- New Jersey: Lehigh Valley, 672
- New York: Passenger Fare Reduced, N. Y. C. & H. R., 1000
- New York: Wooden Cars on the Long Island, 1000
- Ohio: Train Speed Limited, 998
- Oklahoma: Ticket Windows, Time for Opening, 672
- Oklahoma: Two-Cent Fare for the Wichita Falls & Northwestern, 672
- Oklahoma, St. Louis & San Francisco Recommended to Improve Its Lines, 1093
- South Dakota: Through Rates, 672
- Wisconsin: Express Rates, 839

State Ownership (See Government Ownership)

Stake Pocket, Collapsible, 1169*

Station (See also Yards and Terminals):

- Chicago (See Chicago, Development of Railway Facilities)
- Dead Line for Station Platform, 426*
- Jamaica, L. I., Long Island Railroad, 183*, 508*
- Jersey City Passenger Station Reconstruction; C. of N. J., 115*
- Montclair, N. J., Station, 9*, 54
- Oregon-Washington Railroad & Navigation Company, at Spokane, 817
- Organization, 52
- Platform Tickets, 161
- Traffic at South Station, Boston, 576
- Westerly, R. I.; N. Y. N. H. & H., 301

Statistics (See also Earnings):

- Interstate Commerce Commission Figures for 1902 and 1912, 650
- Juggling Railway Statistics, 853†, 1020
- Railway Results in 1912 Compared with 1902, 345
- Statistical Information Practices, 213†
- Statistics of Railways for the Year Ended June 30, 1912, 180

Staybolt (See Locomotive)

Stock (See Finance)

Stoker (See Locomotive)

Stokers, Mechanical (See Locomotive)

Stop, Automatic Train (See Signaling)

Street Railways (See Electric Railways)

Strike (See Employee)

Subways: New York, 241, 715

Sulzer Bros.: Diesel Locomotive, 697*

Sulzer, William, Impeachment of, 256†

Superheater:

- Handling Superheater Locomotives, 334
- Superheater Locomotives, 96
- Superheater for New Haven Locomotives, 161
- Young, Locomotive, 1169*

Supply Department (See also Railway Storekeepers' Association):

Railway Supply Department, 857

Surveying: Simple Method of Obtaining Time and Azimuth, 1186*

Surety Company Methods, 531

Switch:

- Frog Angles, Methods of Calculating, 293*, 504†, 774
- Switch Stands, 519
- Triplelock Switch Machine, 781*

T

Table: Feet and Miles Table, 793

Tariff:

- Charges for Copies of Tariffs, 172†
- Minnesota Tariffs, New, 886
- Simplification of, Movement for, 816
- Target, The Fulton Pocket, 1194*
- Telegraph (See also Association of Railway Telegraph Superintendents):
- Poles, Reinforced Concrete, 286
- Wireless Telegraph Extensions, 667
- Wireless to Trains, 1036

Telephone:

- Don'ts for Operators and Others on Railroad Telephone Lines, 64
- Interstate Commerce Commission Investigation, 301
- Selector System, 384
- Telephones in Ticket Offices, 214†, 325
- Terminal (See Yards and Terminals)
- Terminal Railroad Association of St. Louis: Reorganization Plan, Proposed, 249
- Traffic Increase, 1039
- Texas: Railways Needed, 927
- Theft (See Train Robberies)

Ticket:

- Abuses on the Pennsylvania Railroad, 881
- Redemption on the Pennsylvania, 304
- Ticket Agents' Contest; B. & O., 714, 966

Ties and Timber (See also American Wood Preservers' Association; also Maintenance of Way):

- Concrete Ties, Design of, 259†
- Device for Loading, 1181*
- Douglas Fir Car Material, Specifications and Rules for, 557
- Preservation of Timber, 791
- Reclaiming Timber with a Resawing Machine, 105
- Tie Supply and Cost, 99†
- Ties Laid by the N. Y. N. H. & H., 343
- Treated Ties and Track Circuits, 780

Timber Preservation (See Ties and Timber)

Time and Azimuth, Simple Method of Obtaining, 1186*

Tire (See Wheel)

Toledo, St. Louis & Western: Mail Contract, Unprofitable, 241

Tool (See Machine Tools)

Track (See also Maintenance of Way; also Construction, New):

- Foundations, Concrete, for Heavy Service Tracks, 508*
- Frog Angles, Methods of Calculating, 293*, 504†, 774
- Shifter, Track, 294*
- Shifting a Long Section of Track, 782*
- Tests of Track Devices, 277†, 279*
- Track Layer, Three Men, 525*
- Track Supply Association (See Roadmasters' and Maintenance of Way Association)
- Trade Unions (See Employee)
- Traffic Club of Chicago: Railway Employee and the Railway Patron, 1065
- Train Despatchers' Association of America: Annual Convention, 15

Train Despatching:

- Block System and the Train Despatcher, 258
- Form 19 Exclusively, 1136
- Is Standard Code Rule 20 Safe? 1114†
- Northern Pacific Abandons Form 31, 1054†
- Telephone, 63, 343, 469, 1085
- Telephone Selector System, 384
- Train Operation Sixty Years Ago, 339*

Train Lighting (See Lighting)

Train Resistance: Freight Train and Canal Boat Resistance, 958*

Train Robberies, 63, 240, 343, 527, 628, 991

Train Rules (See also American Association of Railroad Superintendents):

Train Operation Sixty Years Ago, 339*

Train Stop, Automatic (See Signaling)

Trainmen (See Employee)

Tramp Problem, 213†, 629

Transformer Practice, 813

Transportation Club of Indianapolis: The Railway Situation and Its Causes, 767

Transportation System of the Steel Corporation, 481†, 486*

Traveling Engineers' Association: Annual Convention, 273, 315†, 331

Trestle (See Bridge)

Trucks:

- All-Steel Trucks of C. P. R., 1163*
- Bearings (See Bearings)
- Link Side Bearing Truck, 1167*
- Tender Truck, Equalized Swing Motion, 386

Trust (See also Finance; also Public, Railways' Relations with)

Tunnel (See also Subway):

- Canadian Northern at Montreal, 640†, 651*
- Clinchfield Extension, C. C. & O., 861*
- Louisville & Nashville Tunnel Work, 143*, 225*

Moffat Tunnel Report, 1036

Tunneling: Explosives for Use in Tunneling, 526

Turntable Tractor, 62*

U

Underframe (See Car)

Union (See Employee)

Unions, Mark Steel, 98*

Union Pacific:

- Dissolution Plan Approved, 12
- Educational Bureau, 63
- Motor Car Troubles, Their Symptoms, Causes and Remedies, 298
- Ore Transportation, 492
- Tourist Sleeping Cars, 430

Union Switch and Signal Department: Copy

Service Department, 301

United States Express Company: Annual Report, 669

U. S. Metal & Mfg. Co.: Collapsible Stake

Pocket, 1169*

United States Steel Corporation:

- Earnings, 199
- Profit-Sharing Records, 1036
- Transportation System, 481†, 486*
- Unfilled Tonnage, 160, 714, 927

Universal Mail Dispatcher Company: Jones' Mail

Catcher, 758*

University of Cincinnati: Co-Operative Course

in Railway Engineering, 298*

University of Minnesota: Railway Course, 629

V

Valuation of Railways:

Committees Appointed, 1085

GENERAL INDEX—Continued.

[Illustrated articles are indicated thus*; Editorials thus†; Letters to Editor thus‡.]

Valuation of Railways (Continued):
 Cost of Valuation Work, 242
 Cost, Original, Versus Cost of Replacement, 450
 Depreciation or Valuation of Properties, 274*
 Equipment Valuation, Assignment by States, 21*
 Federal Valuation Board, 715
 Illinois, 1036
 Kansas City Southern Valuation Committee, 469
 Kansas Railways, 424
 Maps, Valuation, 527, 598†, 716
 Minnesota Rate Decisions, Significance of, 89, 139†
 Pennsylvania System Committees, 27
 Progress in the Federal Valuation of Railways, 608
 Railroad Valuation Committee, 18, 160
 State Commissions to Aid, 26
 Valuation Commission Applicants, 427, 991, 1053†
 Valuation Committee, Advisory, 475
 Valuation Committees, Missouri Pacific, 879
 Valuation Expenses, Order of Interstate Commerce Commission, 343
 Valuation of Ohio Railways, 159
 Valuation of Public Utilities, 444†
 Valuation of South Dakota Railways, 240
 Wisconsin, 1036
 Vanadium (See Wheel)
 Varnish (See Paint)
 Ventilator, Cab Window, 1128.
 Ventilation: Motor-Driven Ventilating Sets for Buildings, 712*
 Viaduct (See Bridges and Buildings)

W

Wages (See Employee)
 Wartime Railroad in Mexico, 702

Water Service:
 Concrete Water Trough, 783*
 Oil Engine in Railway Water Service, 277†, 289
 Water Supply, 784
 Waterways:
 Panama Canal Work, Last Stages of, 470
 Halifax Ocean Terminals, 388
 Stubbs on Waterways, 373
 Watauga & Yadkin River: Methods of Handling Light Earthwork, 287*
 Waycross & Western: Stock Raising to Be Developed, 1090
 Weighing (See also Scale):
 Net Weight Law, Tests for, 669
 Weighing Bureau at Chicago, 527
 Weir & Craig Manufacturing Company: Turntable Tractor, 62*
 Welding:
 Eccentric Welding, 369
 Welding and Cutting with Oxygen and Illuminating Gas, 196*
 Welin Marine Equipment Company: Crane, Compensating Quadrant, 197*
 Wells Fargo & Company Express:
 Efficiency Committee, 160
 Foodstuffs, Handling, 384
 West Coast Lumber Manufacturers' Association: Specification and Rules for Douglas Fir Car Material, 557
 Western Classification Committee: Made Permanent, 1108†, 1140
 Westinghouse, George, Receives Grashof Medal, 1136
 Western Maryland:
 Air Brake Instruction, 343
 Engine Terminals, 189*
 Gettysburg Celebration Service, 343
 Safety First, 965
 Western Pacific:
 Ferry Steamer, 501*
 Fire Prevention, 578
 Shops at Sacramento, Cal., 564*

Western Railway Club:
 Shop Output, 1005†, 1018
 Training the Railway Employee, 765
 Wheel:
 Drop Test of Heat Treated Chrome Vanadium Wheels, 573*
 Wreck Caused by a Broken Tire, 814*
 Wrought Steel Wheel, 902
 Whitewashing (See Paint)
 Wood (See Ties and Timber)
 Wood Preservation (See Ties and Timber)
 Wood Preservers' Association: Tenth Annual Convention, 1177
 World Circled in Thirty-six Days, 276

Y

Yards and Terminals (See also Station):
 Bumping Posts, Necessity for, 741†
 Chicago (See Chicago: Development of Railway Facilities)
 Chicago Freight Terminal, M. St. P. & S. S. M., 321*
 Efficiency in Yard Service, 1113†, 1153†, 1154† (See also Car Service; Movement, Increasing Freight Car)
 Engine Terminal at Cumberland, Md.; B. & O., 709*
 Engine Terminals, Western Maryland, 189*
 Milwaukee Terminal and Yards, C. M. & St. P., 19*
 Montreal Terminal, Canadian Northern, 640†, 651*
 Ore Docks at Two Harbors, Minn., 486*
 St. Louis Freight Terminal; St. Louis Southwestern, 218*
 Silver Grove, Ky., Yard; C. & O., 117*
 Terminal at Spokane, Wash.; O.-W. R. R. & N., 817*
 Yard at Mechanicville, N. Y.; Boston & Maine, 775*
 Young Men's Christian Association: Benefits to Employees, 834

NEW BOOKS.

Air Brake Association, 1152
 American Railroad Economics, 1213
 American Society for Testing Materials, 1212
 American Society for Testing Materials Index, 485
 Atlas of Railway Traffic Maps, 601
 Civil Engineers' Pocket-Book, 135
 Commission Regulation of Public Utilities, 946
 Design of Plate Girders, 1059
 Diagram Giving Stresses in Beams, 813
 Edward A. Mosely, The Life Work of, 601
 Electric Interlocking Handbook, 402
 Factory Lighting, 694
 Field Engineer's Handbook, 742
 Foreign Markets for Railway Supplies and Equipment, 554
 Freight Rates: Studies in Rate Construction, 319
 Government Ownership of Railways, 1112
 International Association for Testing Materials, 1212
 Laboratory Manual of Testing Materials, 1212
 Locomotive Boiler Construction, 742
 Lure of the Iron Trail, The, 402

Manual of Statistics; 1913 Edition, 83
 Master Blacksmiths' Association Proceedings, 1913 Convention, 1152
 Metallography of Iron and Steel, 1213
 Overhead Electric Power Transmission, 1212
 Places of Pilgrimage for American Travelers, 601
 Poor's Manual of Public Utilities, 5
 Proceedings of the Fifth Annual Convention of the Tool Foremen's Association, 1152
 Proceedings of the Society for the Promotion of Engineering Education, 694
 Railway General Foremen's Association Proceedings, 1913, 1152
 Railway Library for 1912, The, 601
 Railway Signal Engineering, 44
 Railway Track Handbook, 946
 Reinforced Concrete Wall Footings and Column Footings, 770
 Resuscitation, 601
 Rules of Management, 554
 Safety Through the Block Signal System, 900
 Sayings and Writings About the Railways, 363

Science of Burning Liquid Fuel, The, 44
 Solution of Railroad Problems by the Slide Rule, 44
 Standard Specifications for Steel and Steel Products, 900
 Statistics of Railways, 900
 Steam Consumption of Locomotive Engines from the Indicator Diagrams, 173
 Steel Designing, 5
 Strength of I-Beams in Flexure, The, 813
 Strength of Materials, 1213
 Suspension Bridges, 1213
 Transformer Practice, 813
 Traveling Engineers' Association Proceedings, 1913 Convention, 1152
 Truth About the Railroads, The, 1112
 Universal Directory of Railway Officials, 1913, 363
 Wright on Building Arbitrations, 813
 Wright on Quantities, 645
 Year Book of the American Society for Testing Materials, 1213

PERSONAL.

[Portraits are indicated thus*.]

Adams, Prof. Henry C., 575
 Allen, A. E., 251
 Allen, Charles W., 585, 1146*
 Anderson, James C., 1144
 Appleton, Walter U., 889

Baird, J. B., 1001*
 Barrows, Walter A., 251*
 Bee, William G., 352*
 Beggs, J. H., 35*
 Begien, R. N., 74*
 Bell, J. O., 128
 Bennett, J. L., 434*
 Bentley, H. T., 841*
 Biscoe, Howard M., 433*
 Blaess, A. F., 724
 Blair, J. P., 840
 Blakeley, Henry, 1044
 Blaser, F. E., 159
 Borland, William J., 575
 Boyle, Edward F., 672
 Bradford, C. C., 637*
 Bretzfeld, Silas W., 887
 Brown, Brooks G., 724
 Brown, William C., 953*
 Browne, L. C., 433
 Bull, W. F., 582
 Burt, A. M., 1205
 Bush, Benjamin F., 150*
 Bush, H. C., 1144*

Butler, Pierce, 833
 Butler, W. W., 1206*
 Caldwell, George Kearsley, 538
 Clifford, E. A., 1002
 Clough, William P., 372*
 Connors, F. E., 1045
 Cook, H. G., 311*
 Coughlin, W. G., 1145*
 Crownover, G. M., 583*
 Croxton, Warner Winston, 311
 Cunningham, C. S., 633
 Cunningham, J. L., 311*
 Cunningham, W. J., 722*, 740

Dailey, M., 250
 Dawson, Ralph F., 888
 Deschenes, Edmund, Jr., 722
 Devans, E. J., 723*
 Dickson, J. B., 1245*
 Douglass, Dana C., 801
 Downing, I. S., 584*
 duBray, Arthur B., 1000

Eaton, Osmon L., 583*
 Elliott, Frank S., 350*
 Elliott, Howard, 177*
 Everett, William Curren, 635
 Fleming, David B., 676*

Ford, E. I., 433*
 Foss, Arthur P., 166
 Foster, Charles Beverly, 167
 French, C. L., 537*
 Fyfe, R. C., 1144*

Gardiner, E. P., 434
 Gardner, G. Clinton, Jr., 1145*
 Garstang, William, 1245*
 Gibbs, J. W., 1045*
 Gifford, H. E., Jr., 890
 Goss, W. F. M., 26
 Grenfell, E. I., 1000*
 Griffin, Thomas A., 1248*
 Gumbes, J. H., 1245

Hadley, Dr. Arthur T., 549
 Hadley, Herbert S., 833
 Hannaford, J. M., 373*
 Harrison, Fairfax, 1084*
 Harrop, J. L., 431
 Hattan, W. C., 1246*
 Hayes, Carlos A., 167
 Hensley, L. J., 722*
 Hilton, Alexander, 802*
 Hine, Major Charles, 723*
 Hodgson, John L., 477
 Holbrook, F. S., 800*
 Hudson, E. E., 938*
 Hulme, T. W., 1001*

Hustis, James H., 179*
 Hyndman, F. T., 34*
 Hyzer, E. M., 1204*
 Jacobs, M. H., 888
 Jenks, C. O., 207
 Johnson, Charles W., 841*
 Johnson, James Edward, 167
 Johnson, J. M., 250*
 Jones, W. I., 311*

Kain, Edward M., 208

McDonald, Morris, 88*
 McGraw, Thomas W., 582
 McIlvaine, Charles L., 351
 McInerney, M. G., 801*
 Mackenzie, Hugh D., 889*
 McOuillen, J. E., 393
 McWhite, George Edwin, 394
 Mann, A. C., 478*
 Mantell, John J., 1245
 Marshall, J. F., 76
 Martin, W. S., 476*
 Mays, F. K., 539*
 Mellen, Charles S., 426
 Milner, B. B., 842
 Moore, James S., 1096
 Motsett, Charles H., 635
 Moriarty, G. A., 724*

Nelson, C. W., 723*
Nelson, Fred W., 802
Neville, Maurice A., 393
Newlean, J. W., 800*
Nicholson, Macy, 251
Nixon, W. C., 914*
Noble, L. C., 253*

Passmore, H. E., 803*
Patterson, Geo. E., 250*
Patterson, Harry E., 801
Pearce, Hollis C., 351*
Porcher, Samuel, 252*
Prendergast, R. O., 167*
Prendergast, W. E., 1144*
Price, Alfred, 207
Purdy, Frank A., 1147*

Quayle, Robert, 841*

Reinhardt, A. M., 34*
Rettinghouse, H., 841*
Rich, Edson Prosper, 249*
Richards, J. T., 75*
Risley, Fred. Smith, 676

Schmoll, G. A., 311
Schumacher, T. M., 840*
Sesser, John C., 166*
Shaw, Arthur Campbell, 208
Slade, George Theron, 393
Slocum, Ernest F., 435*
Smart, George E., 889
Smith, A. H., 1129*
Smith, Charles Edward, 208

Spratt, Thomas, 394
Stevens, James Paul, 537
Stewart, C. F., 434
Stone, A. J., 1244*
Stone, Everett E., 536
Strickler, T. J., 310
Stringer, W. T., 840
Sweetman, E. M., 1001*

Taylor, Leon R., 878
Thompson, Harrison G., 210*
Trenary, G. H., 34*
Tyter, James D., 888*

Underwood, W. H., 538

Van Winkle, J. Q., 165*

von Donop, Lieut.-Col. P. G., 160

Wallace, John F., 63
Warnock, Harry Rose, 635
Watkins, R. C., 128*
Watlington, Edgar H., 1147
Watters, J. H., 477*
Whitcomb, F. L., 1247*
Wiggins, William D., 76
Winchell, B. L., 51*
Wise, M. J., 887*
Witt, C. C., 310
Wood, Frederick H., 1000
Woodworth, J. G., 722*
Wolfsberger, S. C., 582
Worcester, H. A., 208*

ELECTIONS AND APPOINTMENTS.

Abeles, Robert, 350
Abeles, Robert, Jr., 350
Aagard, P., 724
Abbott, George W., 477
Abeles, J. D., 350
Adams, A. B., 351, 393
Adams, Edward L., 802
Adams, F. G., 208
Adams, G. W., 1001, 1044
Adams, Guy, 1000, 1096
Adams, H. M., 251
Adams, T. T., 129
Aird, G. A., 350
Akans, E. L., 842
Allen, A. E., 251
Allen, E. R., 1205
Allen, J. E., 840
Allen, N. C., 33
Allen, P. C., 936
Allen, W. B., 250
Allen, W. K., 1,000
Alling, E. W., 539
Alsip, J. F., 1204
Amos, J. L., 538
Anderson, A. J., 537, 583
Anderson, F. T., 433
Anderson, James C., 1144
Anderson, P. E., 35
Anderson, R. J., 393
Andrew, A. G., 75
Andrews, Frank, 74
Andrews, George W., 310
Ansley, L. M., 1144
Anthony, Mark, 583
Appleton, W. U., 677, 889
Armsby, E. H., 75
Armstrong, A. G., 34
Armstrong, Frank, 801
Armstrong, R. F., 887
Arn, Wm. G., 1001
Arnold, Brent, Jr., 888
Attwater, H. P., 477, 1001
Auch, Ira S., 208
Austin, C. B., 1001
Avery, W. W., 888
Avila, Henry, 1044

Bacon, G. H., 433
Bagley, G. B., 538
Baird, A. M., 1045
Baird, F. C., 1144
Baird, H. L., 1144
Baird, J. B., 888, 937, 1001
Baker, C. D., 128
Baker, J. L., 1144
Baldwin, J. F., 433
Baldwin, W. A., 1205
Ball, Webb C., 1096
Barclay, D. B., 477
Barker, B. S., 165
Barkley, J. O., 538
Barnes, Lee, 129
Barnes, R. Lea, 128
Barnes, William C., 1245
Barnes, W. E., 677
Barrett, J. Lee, 723, 888
Barrett, Richard L., 207
Barrows, W. A., 251
Bartlette, O. H., 801
Batchelder, E. W., 1205
Bate, S. M., 937
Bates, F. E., 1144
Baum, W. W., 251
Beacom, T. H., 1244
Beam, J. C., 888
Beardsley, W. F., 583
Beauman, L., 477
Becker, R. A., 802
Beckett, F. T., 1205
Beggs, J. H., 35
Begien, R. N., 74, 676
Bell, J. O., 33, 128
Bennett, G. W., 676
Bennett, J. L., 351, 434
Benscoter, C. A., 888
Bentley, Charles S., 350
Bentley, H. T., 841, 842
Benton, I. A., 583
Berry, H. H., 350
Best, J. H., 130
Bettis, H. L., 1096, 1204
Beyer, O. S., Jr., 35

Beyers, B. C., 250
Bibby, William, 34
Biddle, W. B., 74, 1143
Bills, Parker, Shields & Brown, 1096
Bills, John C., 1096
Bisbee, F. M., 434
Bishop, H. L., 889
Bishop, John T., 889
Biscoe, Howard M., 433*, 434
Bissell, F. E., 676
Black, Chas. N., 476
Blackman, C. S., 538
Blaess, A. F., 434, 724, 889
Blair, E. S., 538
Blair, J. P., 840
Blair, S. K., 433
Blair, W. L., 433
Blake, W. C., 130
Blakeley, Henry, 937, 1001, 1044
Bland, A. S., 75
Blaser, Gus, 937
Blech, C. K., 1245
Blewett, V. A., 538
Blood, C. C., 35, 167
Bodamer, Edward, 936
Boehm, W. A., 802
Boggs, J. E., 1097
Boles, E. H., 35
Bollons, W., 129
Bond, Thomas, 887
Booth, P. W., 635
Booth, W. L., 393
Borner, William, 1246
Boschke, G. W., 129
Bothwell, C. K., 538
Bowden, J. F., 311
Bowen, A. C., 310
Bowersox, Charles, 1097
Bowes, T. F., 34, 74
Bowman, D. M., 888
Boyce, G. F., 801
Boyd, C. D., 208
Boyle, A. A., 888, 1044
Boylston, S. C., Jr., 350
Boynton, R. D., 252
Brady, F. P., 250
Brandt, H., 310
Brass, J. L., 129
Breckenridge, B. T., 888
Brendel, F. L., 350
Bretschneider, W., 393
Bretzfeld, Silas W., 887
Briece, G. W., 676
Brimson, George M., 249
Brinton, J. C., 840
Brittain, H. B., 310
Brooks, C. E., 310, 936
Brooks, W. G., 1205
Brosnahan, T. F., 583
Broughton, M. H., 635, 676
Brown, A., 208
Brown, B. G., 538, 724
Brown, C. D., 129
Brown, C. M., 840
Brown, Charles W., 1096, 1097
Brown, Collingwood B., 75
Brown, E. L., 128
Brown, E. N., 128, 676
Brown, F. W., 840
Brown, H. E., 582
Brown, Harry G., 1044
Brown, Harry S., 1143
Brown, J. A., 250
Brown, L. M., 477
Brown, L. S., 250
Brown, Orno M., 34
Brown, S. M., 538
Brown, W. C., 1000
Brown, W. W., 74
Browne, L. C., 433
Browne, C. B., 538
Brumley, D. J., 1045
Bruner, Howard, 583
Buchanan, J. S., 350
Buchannon, W. B., 249
Buckley, M. J., 128
Buick, James M., 310
Bull, W. F., 537, 582
Bullard, C. L., 1143
Burch, H. F., 887
Burckhalter, F. L., 1205
Burgess, S. E., 889

Burgess, T. H., 635
Burke, F. J., 477, 538
Burns, J. B., 677
Burns, Robert, 1245
Burns, W. H., 74
Burrell, C. F., 1205
Burres, L. G., 33
Burt, A. M., 1143, 1145, 1205
Bush, B. F., 128, 676
Bush, Harry Charles, 1144
Butler, Frank J., 350
Butler, S. S., 250
Butler, W. S., 351
Butz, J. W., 1000
Byers, B. C., 1096, 1143
Byers, Robert F., 1097
Byrne, W. B., 1044
Cahill, M. H., 936
Cain, D. D., 434
Cain, P., 129
Caldwell, G. K., 538
Calkins, C. H., 635
Calvin, William J., 1097
Cameron, Wilfred S. R., 888
Campbell, A. O., 635
Campbell, F. C., 434
Campbell, Roy B., 840
Campbell, Y. C., 250, 310
Cannon, C. S., 350
Cannon, J., 840
Card, W. A., 33
Carmichael, J., 129
Carothers, J. B., 74
Carroll, W. F., 1044
Carson, C. E., 801
Carter, A. J., 33
Carter, E. E., 1204
Carter, William H., 801, 1143
Casson, Robert, 1096
Castron, H. G., 677
Cathcart, J. M., 584
Causey, W. B., 801
Chamberlin, E. J., 840
Chandler, G. A., 207
Chandler, H. W., 251
Chapman, C. A., 537
Charlton, R. C., 130
Chavannes, E. A., 722
Cheesman, A. W., 538
Cheney, M. P., 34
Chesney, C. R., 889
Chevers, W. H., 888
Chisholm, W. C., 207
Chittendon, G. C., 35
Choate, F. B., 537
Church, John E., 128
Claiborne, C. O., 1204
Clark, C. M., 1204
Clark, H. R., 1145
Clarke, R. E., 33, 393
Clarkson, W. S., 539
Cleaver, F. C., 350
Cleaver, G. C., 1097
Cleveland, George C., 635
Clifford, E. A., 937, 1002, 1145
Clifford, J., 434, 889
Clifford, J., 937
Clough, W. P., 249
Cobb, E. R., 74
Coble, W. M., 937
Coe, J. A., 676
Coe, T. W., 477
Coffin, George W., 350
Colbert, James T., 74, 207
Colclough, R., 128
Coleman, D'Alton C., 166
Coleman, J. F., 1204
Collett, R., 1205
Collins, W. W., 1143
Comer, E. T., 249
Condon, D. M., 252
Conlan, J. H., 250
Conn, J. J., 1045
Connolly, P. C., 250
Connors, F. E., 937, 1045
Coogan, M. T., 800
Cook, H. G., 167, 311
Cook, John S., 477
Cook, R. A., 167
Coons, B. F., 538
Cooper, H. A., 538

Cooper, R. L., 1246
Cooper, W. L., 130
Copony, A., 434
Corbett, William H., 1096
Cornell, F. R., 350
Cornell, J. D., 1245
Cornell, W. S., 840
Cosgrove, J. H., 477
Costigan, W. C., 434
Costin, E. M., 166
Cottrell, H. M., 583
Couffer, U. G., 1143
Coughlin, T. M., 887
Coughlin, W. G., 1096, 1097, 1145
Coulston, J. R., 583
Courtney, J. E., 538
Cousley, W. T., 252
Cowley, J. P., 582
Coyes, J. M., 538
Coyle, T. E., 1143, 1244
Coynce, O. E., 723
Cox, L. J., 75
Cox, O. W., 75
Crabbe, W. G., 582
Craig, J. A., 251
Craig, J. L., 350
Crane, W. S., 676
Crowder, R. V., 583
Crowell, John W., 1044
Crowl, W. S., 1097
Crownover, G. M., 393, 583
Croxtan, W. W., 166, 311
Cruise, F. P., 724
Cumberland, G. H., 635
Cummins, J. I., 1204
Cundry, W. H., 583
Cunningham, E. E., 888
Cunningham, J. L., 252, 311
Cunningham, William J., 676, 722
Curran, W. G., 936
Curtis, D. C., 842
Curtis, Stanton, 310
Cushing, T., 393
Cutler, J. G., 35
Cutler, J. M., 251
Dabney, Charles T., 583
Daggett, F. D., 840
Daggett, S. F., 1044
Dahler, A. M., 476
Dailey, M., 207, 250
Daily, C. B., 35, 129
Daily, J. J., 208, 937
Daley, J. H., 539
Dana, C. C., 75
Dancey, M. W., 677
Danner, G. W., 74
Dare, S. H., 537
Davidson, Albert, 208
Davis, George J., 129
Davis, H. A., 434
Davis, J. M., 1244
Davis, M. P., 1205
Dawson, R. F., 676, 888
Dean, J. S., 1244
DeForce, J. L., 1143
Deimling, J. F., 1145
Delahunt, W. V., 310
Dempster, Gilbert, 802
Denham, J. S., 1096
Denney, C. E., 724
Deschenese, Jr., E., 582, 722
Deuel, Guy A., 538
Devans, E. J., 676, 723
Dewey, C. E., 75
Dickie, L. B., 537
Dickinson, F. B., 888
Dickson, J. B., 1205, 1245
Doner, E., 887
Donnelly, J. J., 582
Donahy, J. A., 676
Dooley, M. J., 538
Douglas, C. Dallas, 1143
Douglas, J. S., 33
Douglass, D. C., 128, 801
Dow, F. C., 310
Dow, F. M., 582
Dowdell, T. J., 1044
Downing, D., 539
Downing, I. S., 477, 584
Downs, Lawrence A., 128, 166
Doyle, James, 250

ELECTIONS AND APPOINTMENTS—Continued.

- Doyle, J. W., 1044
 Droegge, John A., 537
 Drummond, H. N., 350
 Dryden, G. H., 129
 Drysdale, H. S., 538
 Drysdale, W. F., 1246
 duBray, Arthur B., 1001
 Duer, J. V. B., 1097
 Duke, A. W., 434
 Duke, J. B., 33
 Dunkle, H. O., 1205
 Dunlop, P. T., 129, 311
 Durrett, J. L., 34
 Durrett, W. B., 1001
 Duval, J. E., 250
 Dwelle, Lee A., 1205
 Dye, Edward A., 888
- Eagan, W. T., 582
 Earp, G. H., 538
 Easley, F. J., 1245
 Easton, F. W., 477
 Eaton, J. C., 723
 Eaton, O. L., 537, 583
 Eckels, C. P., 1205
 Eddy, A. G., 166
 Edgcomb, E. F., 75
 Edmonds, A. S., 538
 Ekin, W. L., 75
 Elliott, Charles, 393
 Elliott, F. S., 166, 350
 Elliott, Howard, 393
 Ellis, J. H., 476
 Ellis, T. L., 34
 Ellzey, T. F., 840, 888
 Emerson, T. M., 1244
 Enright, J. F., 937
 Ensign, C. P., 583
 Epler, J. E., 33
 Eslick, F. C., 433
 Estep, H. C., 34
 Estes, P. N., 889
 Eudaly, E. R., 888
 Everett, W. C., 582, 635
 Eversman, Frank, 801
 Ewing, D. L., 75
- Faherty, William J., 251, 537
 Fallon, James P., 801
 Fargo, W. S., 129
 Farmer, I. H., 538
 Farmer, R. R., 166
 Farnsworth, Ellis, 538
 Farr, E. A., 350
 Farrell, J. W., 393
 Farrell, W. H., 537
 Fariss, J. M., 1044
 Feiser, W. J., 801
 Fell, H. E., 1000
 Field, C. J., 166
 Finley, W. W., 1096
 Fisher, Charles D., 1097
 Fisher, G. A., 889
 Fitzgerald, J. A., 635
 Flavin, J. T., 724
 Fleming, D. B., 582, 676
 Fleming, H. B., 250, 350
 Flick, John, 537
 Florence, C. A., 888
 Flounders, W. R., Jr., 936
 Flynn, Charles, 1045
 Flynn, Frank H., 676
 Fogg, W. H., 676
 Folger, G. H., 676
 Foote, C. F., 802
 Ford, T. S., 165
 Fordyce, William C., 310
 Foreman, R. J., 75, 208
 Forgason, J. W., 250
 Foss, Arthur P., 74, 166
 Foster, C. B., 129, 167, 539
 Foster, W. E., 207
 Foster, William H., 537
 Fox, C. B., 538
 Fox, C. H., 676
 Fox, Eugene, 1245
 Francis, William C., 582
 Frank, S. E., 166
 Franklin, F. S., 75
 Fraser, G. M., 537
 Fraudentier, W. J., 477, 583, 677
 Fredenburg, B. W., 888
 Freeman, Charles H., 75
 French, C. L., 537
 Frey, W. J., 889
 Frost, W. J., 208
 Fuller, T. J., 724
 Fuller, W. F., 350
 Funk, George H., 889
 Furry, F. C., 34
 Fyfe, R. C., 1144
- Gale, William H., 1097
 Galvan, J. B., 477, 801
 Gallaway, G. E., 936
 Gardner, E. P., 434
 Gardner, G. Clinton, Jr., 1145
 Gardner, H. W., 889
 Garner, R. D., 635
 Garstang, Wm., 1245
 Garvin, R. A., 350
 Gaven, J. J., 128
 Gay, C. E., Jr., 635
 Geiger, George, 477
- Gibbons, J. M., 677
 Gibbs, Frank, 842
 Gibbs, J. W., 1045
 Gibson, J. B., 1245
 Gibson, S. W., 166
 Gifford, F. C., 477, 538
 Gilcreast, F. W., 1097
 Githens, J. N., 251
 Given, W. H., 476
 Glidden, E. R., 33
 Glover, W. H., 208
 Godfrey, T. F., 538
 Goeldner, E. A., 1143
 Goltra, Edward F., 310
 Goodbody, Thomas P., 249
 Goodchild, A. A., 167
 Goodwin, E. P., 393
 Gordon, J. A., 310
 Gourley, C. F., 724
 Graham, J. F., 129
 Graham, Jos., 677
 Gray, D. G., 888
 Gray, H. R., 350
 Green, F. W., 250
 Greenwood, J. L., 1245
 Greer, B. B., 33
 Greer, James D., 1001
 Greig, A. S., 936
 Grenfell, E. I., 801, 1000
 Gresham, W. B., 350
 Griffin, J. M., 538
 Grimm, C. C., 582
 Grimshaw, H. B., 477
 Groening, W. C., 208
 Grove, Ben R., 936
 Guerin, W. H., 1205
 Guild, W. H., 129
 Gullickson, Gustav, 840
 Gumbes, Joseph H., 1096, 1245
 Gumm, F. L., 1001
 Guppy, R. T., 1205
 Gurney, R. L., 310
- Hackett, J. W., 1001
 Hall, J. E., 249
 Hall, W. T., 33
 Halliday, James O., 537
 Hamilton, George W., 583
 Hamilton, P. H., 583
 Hammel, W. A., 351
 Hammond, E. W., 1097
 Hancock, George A., 129
 Hancock, J. A., 33
 Hanna, E. E., 74
 Hannaford, J. M., 249
 Hannam, M. J., 840
 Hansel, Charles, 76
 Hanson, C., 208
 Hanson, R. G., Jr., 1097
 Hanssen, Frederick, 393
 Harris, J. M., 129
 Harris, Page, 477
 Harrison, Fairfax, 1096
 Harrison, F. E., 129, 1144
 Hartman, H. K., 433
 Hartsough, W. H., 888
 Haskell, E. A., 477
 Hatfield, M. B., 75
 Hattan, W. C., 1097, 1246
 Havelly, J. C., 583
 Havens, P. M., 477
 Haver, W. M., 676
 Hawkins, William P., 130
 Hay, F. L., 584
 Hayes, C. A., 75, 167
 Hayes, H. B., 937
 Hayes, T. J., 207, 676
 Hayler, George W., 75
 Hazelgrove, R. L., 434
 Hazlehurst, L. W., 888
 Hazzard, J. L., 677
 Heaphy, A. J., 537
 Heed, T. D., 128, 936
 Hellen, Joseph, 537
 Helliciff, R. H., 76
 Helm, Lawrence N., 350
 Helm, T. A., 538
 Helmick, W. J., 393
 Henderson, S. Y., 251
 Henderson, William, 1143, 1205
 Hennessey, T. W., 677
 Henry, J. M., 1097
 Henry, W. J., 723
 Hensley, C. H., 1204
 Hensley, L. J., 433, 722
 Hering, S. A., 129
 Herlihy, F. J., 677
 Hess, J. J., 538
 Hewson, Joseph W., 166
 Hewes, H. P., 129, 166
 Heyser, E. S., 840
 Hibbard, I. L., 801
 Hickey, G. L., 310
 Hickey, J. E., 208
 Hightower, R. E., Jr., 129
 Hill, C. C., 1145
 Hillebrand, F. B., 583
 Hillis, J. A., 128
 Hilton, Alexander, 802
 Hilton, S. F., 1205
 Hinkins, G. S., 635
 Hine, Charles, 723
 Hitch, C. B., 351
 Hitch, Robert M., 249, 250
- Hitchcock, J. R., 477, 801
 Hixon, J. F., 583
 Hoag, E. C., 1143
 Hobbs, George S., 74, 801
 Hodges, P. C., 75
 Hodgson, J. L., 434
 Hodson, L. E., 74
 Hoffman, C. M., 252
 Hogan, M. F., 166
 Holbert, H. B., 207, 676
 Holbrook, Frederick S., 800
 Holman, J. R., 130
 Holstein, Otto, 537
 Homan, W. H., 128
 Homer, J. L., 75
 Hood, J. E., 351
 Hoopes, E. L., 76
 Hopkins, Guy, 250
 Hopper, W. P., 249
 Horn, Henry J., 128
 Horsman, Clifford B., 75
 Hough, William, 722
 Houston, W. O., 538
 Howard, Charles, 676
 Howard, W. F., 393
 Howe, H. A., 166
 Howell, F. M., 350
 Howson, G. N., 840, 842
 Hoyt, Wm. E., 538
 Hudson, S. M., 677, 800
 Hudson, W. R., 393
 Hughes, A. S., 251
 Hughes, R. T., 801
 Hull, G. A., 129, 477
 Hull, W. F., 936
 Hulme, Thomas W., 1001
 Hundley, E. F., 1001
 Hunter, John H., 249
 Hursh, C. M., 434
 Hurst, W. C., 310, 476
 Hussey, N., 801
 Hustis, J. H., 393
 Hyndman, F. T., 34
 Hyzer, Edward M., 1204
- Imbrie, James, 249
 Irvin, C. A., 1204
 Israel, W. M., 129
 Izard, A. C., 538
- Jackson, C. H., 251
 Jackson, Felix, 74
 Jacobs, Dan, 538
 Jacobs, M. H., 888
 Jackle, W. M., 129
 James, John M., 1096, 1097
 James, R. L., 350
 Jarvis, W. L., 128
 Jasper, C. H., 583
 Jefferson, Mark, 802
 Jeffery, Edward T., 128
 Jenkins, J. F., 635
 Jenkins, W. J., 130
 Jenks, C. O., 166, 207
 Jenner, H. T., 583
 Jones, George A., 723
 Johnson, J. E., 75
 Johns, M. E., 1205
 Johnson, Charles W., 841*
 Johnson, Frank, 842
 Johnson, George E., 802
 Johnson, H. C., 75
 Johnson, J. M., 165, 250
 Johnson, Jack W., 350
 Johnson, James Edward, 167
 Johnson, Kepler, 74
 Johnson, L. E., 74
 Johnson, R. M., 350
 Jones, C. W., 165, 1244
 Jones, E. T., 33
 Jones, M. W., 167
 Jones, W. L., 251, 311
 Jutz, J. F., 350
- Kaderly, W. F., 250, 310
 Kain, Edward M., 129, 208
 Kamps, S. L., 207, 476
 Kane, F. W., 724
 Karr, E. J., 936
 Kavanaugh, J. T., 538
 Kearton, Wilfred, 35
 Keaveny, T., 393
 Kelleher, George C., 393
 Keller, I. M., 208
 Kelly, E. M., 1143
 Kelsey, F. D., 936
 Kendall, W. L., 801
 Kenly, John R., 1244
 Kenly, R. G., 802
 Kenworthy, J. D., 538
 Keough, E. M., 1145
 Kerley, M. S., 251
 Kern, H. F., 477
 Kernan, W. P., 801
 Kerr, G. H., 129
 Kessell, A. C., 166
 Kessell, J. E., 166
 Killian, J. M., 635
 Kilpatrick, J. B., 351
 King, B. D., 583
 King, John S., 723
 King, J. T., 33
 Kirchner, C. F., 1143, 1204
 Kirkman, A. A., 1044
- Klein, Louis F., 34
 Kline, W. C., 129
 Klippel, E. A., 129
 Klock, R. A., 539
 Knapp, J. W., 393
 Knapp, Lester R., 129
 Kneubuehl, A., 433
 Knowl, W. M., 582
 Knowles, L. D., 538
 Kohlhammer, A. H., 676
 Koiler, E. S., 250
 Koons, R. P., 76
 Kruttschnitt, John, 1045
 Kuhns, J. C., 351
- Laden, P., 936
 Lamb, William, 1044
 Lamoreaux, S. J., 888
 Landon, G. W., 582
 Lane, Mills B., 249
 Langley, J. T., 129
 Lauderdale, J. H., 350, 635
 Lawler, Oscar, 1096, 1204
 Lawrence, James J., 477
 Lay, C. C., 74
 Lay, R. E., 1044
 Leahy, W. H., 166
 Leard, H. S., 166, 350
 Lee, A. M., 936
 Lee, George H., 75
 Leland, F. A., 840
 Letts, G. P., 583
 Lewis, Maj. E. C., 1244
 Lewis, H. E., 128
 Lewis, R. H., 393
 Leyden, W. T., 208
 Lightner, A. D., 350
 Lillie, G. W., 129, 477
 Lillenthal, Jess W., 476
 Limming, L. B., 537
 Lincoln, F. B., 1205
 Lindsay, J., 166
 Lindsey, J. C., 34
 Linthicum, P., 35
 List, E. H., 350
 Little, H. H., 477
 Little, Wm. G., 310
 Livingston, E. E., 802
 Livingston, J. J., 888
 Livingston, W. E., 207
 Lock, A. E., 1044
 Lomax, E. L., 251
 Long, L. H., 165
 Lorraine, H. K., 1144
 Lorton, J. G., 33
 Lucia, L. G., 75
 Lucky, A. B., 801
 Luke, I. H., 887, 936
 Luscombe, J. T., 677
 Lusk, James W., 1143
 Lyon, H. L., 130
- McAllister, W. K., 477
 McAtee, P. B., 583
 MacBain, D. R., 724
 McBride, W. C., 538
 McBurney, J. W., 350
 McCabe, J., 539
 McCampbell, T. C., 74
 McCarthy, A. D., 393
 McCarthy, C. A., 677, 841
 McCarthy, C. C., 538
 McCarthy, T. C., 676
 McCarty, R. E., 801
 McCarty, R. J., 433
 McCauley, F. E., 1044
 McClellan, E. E., 840
 McClure, J. C., 165
 McConico, W. R., 75
 McCue, P. L., 1245
 McCullough, J. W., 635
 McDonald, A. B., 937
 McDonald, D., 128, 252
 McDonald, Morris, 74
 McDonald, R. H., 129
 McDougall, George, 677
 McEwen, J. J., Jr., 74
 MacEwen, J. J., 1143
 McFadden, E. H., 635
 McFarland, G. A., 74
 McFarlane, R. E., 351
 McGaw, T. W., 477, 582
 McGinnis, H. M., 888
 McGrain, E. O., 393
 McGreevey, John, 208
 McGuire, P., 35
 McIlvaine, C. L., 252, 351
 McInerney, M. G., 676, 801
 McIntosh, F., 33
 McKee, D. H., 676
 Mackenzie, Hugh D., 677, 889
 McKenzie, J. J., 1205
 McKoy, T. H., 129
 McLaren, J. B., 249
 McLennan, J. D., 249
 McMaster, A. E., 208
 McMullin, C. E., 887
 McNamee, O. B., 840
 McNeff, B. M., 888
 McNeillie, R. G., 129
 McNicholl, George A., 724
 McOuillen, J. E., 311, 351, 393
 McVea, J. C., 433
 McWhite, George Edwin, 394

- McWilliams, R. M., 538
 Maass, Bennett, 947
 Machmer, R. B., 129
 Macklin, H. C., 434
 Madden, John, 74
 Mager, F. W., 802
 Maher, G. W., 34
 Mahoney, C. W., 1001
 Mahoney, T. S., 1096
 Maloney, P. J., 1096
 Malum, L. F., 166
 Manion, J. L., 75
 Mann, A. C., 351, 478
 Mann, C. O., 350
 Mann, J. R., 676
 Mann, L. E., 350
 Manning, George C., 129
 Mantell, J. J., 1205, 1245
 Marble, F. B., 1145
 Markham, L. A., 636
 Marshall, J. F., 35, 76
 Martin, Henry, 1204
 Martin, S. A., 251
 Martin, W. S., 393, 476
 Mason, H. T., 1096
 Mason, T. H., 393
 Matchette, W. P., 1205
 Matheson, J. D., 129
 Mayo, Robert, Jr., 129
 Mays, F. K., 351, 539
 Meek, John L., 888
 Melanson, H. H., 251
 Melchior, William J., 582
 Mellen, C. S., 74, 165
 Melvin, R. C., 1245
 Merrick, H. J., 723
 Merritt, Wesley, 75
 Metzger, George W., 677
 Meyer, C. E., 801
 Meyer, J. F., 128
 Middleton, D. M., 208
 Miles, W. L., 1044
 Miley, C. F., 802
 Mill, J. C., 208
 Millard, C. S., 676
 Milligan, T. F., 350
 Milner, B. B., 842
 Mitchell, Elmer, 677
 Mitchell, F. E., 1044
 Mitchell, W. A., 129
 Mitnell, W. N., 167
 Mizener, Logan A., 350
 Monroe, Lee, 310
 Montague, Howard C., 208
 Montgomery, Hugh, 75, 351
 Montgomery, M. F., 1097
 Moodie, D. E., 130
 Moore, A. B., 129
 Moore, E. D., 477
 Moore, J. L., 1143
 Moore, J. S., 1044, 1096
 Moore, S. B., 476
 Moore, W. H., 840
 Moorman, D. L., 888
 Moran, H. G., 1245
 Mored, H. S., 677
 Morgan, J. A., 75, 251
 Morgan, M. B., 1001
 Moriarity, G. A., 538, 724
 Morris, A. G., 1143
 Morris, A. J., 937
 Morris, A. R., 167
 Morris, George C., 74
 Morris, E. C., 722
 Morris, H. H., 393
 Morris, J. A., 1143
 Morrison, S. A., 128
 Morrison, W. W., 635
 Morris, A. J., 1044
 Morrow, W. A., 477
 Morse, C. A., 75
 Motsett, Charles H., 635
 Moutund, A. F., 433, 476
 Mozier, W. R., 722
 Mudge, H. U., 165
 Mudgett, Harry Decatur, 33
 Mullaly, T. D., 1144
 Mulvihill, W. J., 1044
 Munsell, J. W., 75
 Murphy, C., 166
 Murphy, F. A., 1145
 Murphy, George, 1145
 Murphy, William, 250
 Myrover, George C., 350

 Nash, E. E., 1044
 Nelson, C. W., 723
 Nelson, F. W., 538, 802
 Neuffer, J. G., 393
 Neville, J. A., 250, 350, 393
 Newhall, Daniel S., 209
 Newlean, J. W., 676, 800
 Newton, C. H., 74
 Nicholson, J., 207
 Nicholson, M., 166, 251
 Niswonger, E. A., 251
 Nixon, W. C., 74, 936, 1143
 Noble, S. W., 1044
 Norris, Charles G., 1205
 Norris, I. L., 129
 Norton, I. M., 538
 Norton, P. B., 1205
 Noyes, Walter C., 310

 O'Brien, Frank, 1000
 O'Brien, J. E., 724

 O'Connor, D. J., 433
 O'Donnell, Joseph P., 1044
 O'Gallagher, John P., 166
 O'Hara, Charles, 433
 O'Loughlin, W. M., 35
 O'Neill, J. H., 166
 O'Neill, W. H., 74
 O'Neill, W. J., 841
 Opdyke, Wm. S., 310
 Oren, Fred B., 1001
 Orndorff, J. R., 1145
 Orrock, J. W., 75
 Osborne, H. J., 129
 Osborne, S. H., 635
 Osborne, W., 351
 Ouellet, D. O., 723
 Oviatt, Harry C., 537, 538
 Owen, G. B., 167

 Page, I. M., 252
 Palmer, J. H., 250
 Paquette, C. A., 1145
 Parish, R. G., 889
 Parker, Shields & Brown, 1096
 Parker, H. A., 129
 Parker, H. H., 677
 Parker, R. H., 539
 Parrish, E. J., 433
 Parsons, F. W., 129
 Parsons, R. S., 1204
 Paschall, W. E., 350
 Passmore, H. E., 802
 Patterson, C. H., 75
 Patterson, George E., 166, 250
 Patterson, H. E., 676, 801
 Patton, A. J., 1245
 Patton, F. E., 801
 Patton, J. O., 583
 Payne, G. W., 538
 Payne, W. T., 75
 Peabody, E. W., 310
 Peacock, W. T., 251
 Pearce, H. C., 167, 351
 Pennick, W. H., 677
 Perkins, C. E., 251
 Perkins, H. J., 1097
 Peters, Harold L., 208
 Peterson, Ira N., 433
 Peyton, John H., 1244
 Pfeifer, W. C., 888
 Phelps, H. A., 34
 Phinney, R. H., 1204
 Pierce, H. H., 888
 Pierce, J. E., 677
 Pierce, O., 310
 Pillsbury, W. R., 635
 Pindell, Thomas H., 476
 Place, P. N., 74
 Plott, John F., 434, 1001
 Pointer, T. H., 1044
 Porch, D. L., 537
 Porcher, Samuel, 209, 252
 Porter, B. A., 936
 Porter, C. D., 129
 Porter, C. H., 208, 840
 Porter, Fred R., 208
 Portlock, W. M., 434
 Potts, C. E., 33
 Powell, J. M., 801
 Powrie, W. R., 538
 Prendergast, R. Q., 75, 167
 Prendergast, W. E., 1144
 Preston, W. C., 208
 Price, A., 128, 166, 207
 Price, F., 433
 Prince, B. C., 1244
 Pritchard, R. W., 1205
 Pyeatt, J. S., 249

 Quayle, Robert, 841, 842
 Quigley, Joseph, 937
 Quimby, F. W., 676

 Randall, C. T., 802
 Randolph, K., 1000
 Rankin, E. C., 538
 Rath, Charles K., 75
 Rawls, Leslie, 208
 Rawson, D. H., 433
 Ray, D. L., 538
 Ray, William F., 636, 676
 Redmond, F. A., 840
 Reed, James, 477
 Reed, John M., 350
 Reed, W. H., 538
 Reese, Zack J., 393
 Reich, J. H., 33
 Reid, C. H., 538
 Reid, D. G., 840
 Reinhardt, A. M., 34
 Rettinghouse, H., 841, 887
 Reynolds, J. P., 1097
 Rhame, M. D., 538
 Rhodes, C. B., 251
 Rhodes, J. W., 888
 Rice, N. M., 937
 Rich, Edson Prosper, 33, 249
 Richards, J. T., 75
 Richardson, R. S., 350
 Riggs, Howard E., 676
 Riley, Wm., 722
 Risley, C. H., 128
 Risley, F. S., 582, 676
 Roach, J. B., 677
 Robb, George W., 538
 Robbins, F. S., 129
 Robertson, A. A., 583

 Robertson, Alexander, 165, 676
 Robertson, F. C. N., 722
 Robinson, A. C., 724
 Robinson, D. H., 840
 Robinson, G. L., 1144
 Rochester, R. K., 33, 75
 Rockwell, Samuel, 635
 Rodgers, T. J., 582
 Rogers, Charles L., 310
 Rogers, H. B., 888
 Rohrer, J. A., 802
 Rollings, C. M., 350
 Rose, L. S., 1097
 Rosevear, A. E., 75
 Rosing, W. H. V., 936
 Rothmeyer, W., 583
 Rourke, John, 887
 Rowland, S. V., 33
 Royce, F. D., 251
 Rupp, W. H., 937
 Russell, C. A., 129
 Ryan, E. H., 676

 Saluson, C. T., 801
 Sanderson, C. H., 393
 Sanford, F. B., 166
 Sarvey, A. L., 1145
 Sasser, J. W., 1144
 Sayles, Chas. J., 350
 Scandrett, H. A., 393
 Scherp, J. J., 1001
 Scheurer, Lee B., 208
 Schlacks, Charles H., 128
 Schleyer, G. H., 74, 207
 Schmidt, C. B., 583
 Schmidt, W. G., 434
 Schmoll, G. A., 311
 Schneider, R. F., 677
 Schreck, I. C., 250
 Schroyer, C. A., 842
 Schulze, R. W., 477, 538
 Schumacher, T. M., 840
 Scott, L. G., 802
 Scott, Thomas K., 476, 635
 Scribner, W. H., 129
 Searles, E. J., 311
 Secor, N. W., 583
 Seddon, W. L., 635
 Senger, J. W., 477
 Sesser, J. C., 166
 Seymour, George S., 722
 Shafer, A. B., 1205
 Shannon, J. R., 350
 Sharp, T. F., 433
 Sharpe, H. W., 677
 Shattuck, J. A., 249
 Shaw, A. C., 129, 208
 Shaw, H. J., 393
 Shaw, Robert, 1001
 Sheer, A. G., 1205
 Shelton, T. L., 33
 Shepherd, A. W., 1096
 Sheridan, H. W., 250
 Shipley, J. E., 635
 Shirah, L. C., 350
 Shoemaker, C. A., 801
 Shoop, William R., 724
 Shorter, R. G., 887
 Shreeve, George J., 936
 Shumate, C. A., 350
 Shutt, H. E., 888
 Simmons, Frederick L., 722
 Simmons, T. D., 1096
 Simms, L. N., 1143
 Simpson, R. W., 584
 Sinclair, A. E., 1245
 Singleton, J., 1045
 Slade, G. T., 249, 393
 Slattery, J. T., 887, 936
 Slowey, James F., 208
 Smart, George E., 724, 889
 Smith, C. A., 251
 Smith, C. E., 129, 208
 Smith, C. F., 936
 Smith, E. C., 840
 Smith, G. C., 75
 Smith, George W., 75
 Smith, M. F., 1205
 Smith, R. H., 1143
 Smith, T. G., 74
 Smith, T. M., 433
 Smith, W. C., 1145
 Smith, W. R., 166, 937, 1044, 1143
 Smith, William J., 888
 Smithan, N. L., 677
 Smock, Leroy G., 129
 Smock, R. G., 840
 Sorg, Charles, Jr., 635
 Souerby, Fred W., 537
 Sparks, Ingram T., 1245
 Spies, C. B., 1143
 Spratt, Thomas, 351, 394
 Springer, J. E., 250
 Stack, J. D., 129, 809, 936
 Staley, W. C., 477, 538
 Stayton, W. D., 433
 Stedman, E. A., 166
 Steinel, Alvin T., 583
 Steltenkamp, J. A., 538
 Stephens, R. S., 129
 Stevens, Donald French, 537
 Stevens, Henry D., 249
 Stevens, J. I., 635
 Stevens, J. P., 393, 537
 Stewart, Charles F., 350, 434
 Stewart, C. J., 538

 Stewart, J. B., 1144
 Stewart, M. D., 1001
 Still, H. E., 1001, 1044
 Stocker, F. P., 166
 Stockton, E. H., 251
 Stokes, G. A., 537
 Stokes, William D., 434
 Stoltz, C. F., 1097
 Stone, Albert J., 1204, 1244
 Stone, G. M., 840
 Stone, H. M., 889
 Storey, D. A., 251
 Strain, C. W., 250
 Stringer, W. T., 840
 Stuart, F. C., 351
 Stuart, J. C., 1204, 1244
 Styers, J. V., 1144
 Sullivan, F. J., 537
 Sullivan, M. C., 393
 Sullivan, P. A., 251, 677
 Sullivan, Timothy H., 166
 Sutherland, C. G., 128
 Sutton, John G., 1143
 Sweetman, E. M., 842, 1001
 Sweney, D. R., 677

 Talbot, John S., 888
 Tate, K., 677
 Taussig, J. E., 33, 351, 477
 Taylor, C. M., 129, 477
 Taylor, D. L., 129
 Taylor, E. E., 582
 Taylor, E. S., 887
 Taylor, F. J., 635
 Taylor, H. M., 476
 Taylor, Isaac Maxwell, 840
 Taylor, J. H., 166
 Taylor, J. L., 393
 Taylor, R. W., 129
 Temple, H. H., 936
 Terrell, Roy, 583
 Thomas, F. R., 1097
 Thomas, George W., 1044
 Thomas, J. H., 129
 Thomas, John W., Jr., 1244
 Thomas, W. C., 583
 Thomas, William, 801
 Thorapson, Herbert, 129
 Thompson, J. F., 350, 583
 Thompson, W. H., 74, 75
 Thomson, F. M., 802
 Thomson, George, 208, 477
 Thrower, D. W., 434, 889, 1001
 Tiffin, E., 75
 Tiffin, S. G., 252
 Tillett, C. H., 802
 Tinling, Alex., 1044
 Titus, C. L., 310
 Tobin, Garland, 538, 802
 Todd, C. H., 208
 Torrance, H. M., 250
 Townsend, W. B., 583
 Toye, C. C., 75
 Trelford, T. W., Jr., 251
 Trelford, W. R., 1044
 Trenary, G. H., 33, 34
 Trickett, G. M., 208
 Trimble, J. B., 538
 Tritsch, C. M., 583
 Trott, E. W., 677
 Trowbridge, W. R., 76
 Trumbull, R. S., 166
 Tucker, Sydnor J., 477
 Turner, Avery, 74
 Turner, C. G., 252
 Turner, F. C., 937
 Twynman, J. L., 393
 Tyler, W. T., 207
 Tyter, James D., 676, 888

 Uhlman, F. C., 476, 582, 1096
 Underwood, W. H., 433, 538

 Van Buskirk, H. C., 351
 Van Hecke, D., 74, 166
 Van Horn, C. W., 582, 676
 Van Nottle, W. F., 888
 Van Vliet, B. F., 1143
 Van Winkle, J. Q., 128, 165
 Van Zant, A. R., 583
 Veasey, V. L., 249
 Veitch, J. R., 677
 Vincent, W. H., 722
 Violett, R. C., 1145
 Vollmer, J. C., 937
 Voorhees, H. B., 74, 676
 Voss, Charles N., 676
 Voss, Harry F., 166
 Votaw, G. E., 166

 Wadleigh, Frank A., 251
 Waldron, A. B., 538
 Waldron, N. A., 635, 677
 Walker, C. C., 393
 Walker, F., 433
 Walker, F. B., 677
 Walker, W. K., 1246
 Wallace, C. L., 1045
 Wallace, John F., 249
 Wallace, Joseph A. S., 1245
 Wallace, S. M., 1001
 Wallace, William A., 208
 Walsh, F. J., 351
 Walton, P. G., 393, 477
 Ware, Clarence P., 583
 Warner, A. B., 889
 Warnock, H. R., 583, 635

ELECTIONS AND APPOINTMENTS—Continued.

Waters, J. J., 351
Watkins, R. C., 33, 128
Watson, J. D., 840
Watters, J. H., 477
Watts, J. F., 434
Weatherley, E. P., 1205
Weaver, C. E., 434
Webb, C. H., 310
Webb, E. B., 677
Weber, DeRoo, 350
Webster, F. E., 75
Wedding, H. A., 582
Weeks, Otis, 477
Weisberg, E. A., 677
Weiler, G. S., 477
Weir, R., 350
Welch, J. P., 433
Weller, R. C., 1097
Wells, A. G., 801
Welsh, Maurice A., 539
Welshonce, E. P., 635
Welty, Donald C., 636
West, John T., 350
West, Thomas H., 1143

Westbury, C. W., 889
Westcott, M. A., 75
Westerman, F. N., 888
Weston, H. H., 1001
Whalen, R. F., 1045
Wharton, C. E., 477
Wheeler, George R., 129
Wherritt, W. C., 801
White, L. M., 538
White, P. T., 207
Whitenton, W. M., 1244
Whitham, Harry, 802
Whitney, J. E., 166
Whittington, A. G., 1204
Wickersham, C. A., 635
Wiegand, F. B., 724, 802
Wiggins, W. D., 33, 34, 76
Wilcox, E. M., 252, 724
Wilder, D. U., 1096
Wiles, S. H., 129
Willcutt, G. B., 476
Williams, Alfred, 1143
Williams, Mrs. Cora B., 393
Williams, F. M., 1205

Williams, F. W., 35, 129
Williams, G. E., 477
Williams, H. F., 208
Williams, J. P., 393
Williams, M. R., 1001
Williams, N. A., 936
Williams, R. F., 538
Williams, S. D., Jr., 538
Williams, Walter S., 128
Williams, W. H., 1145
Wilson, E., 128
Wilson, H. R., 635
Wilson, J. B., 1205
Wilson, James G., 887
Winchell, B. L., 74, 75
Wing, P. L., 1096
Winsor, G. H., 165
Wise, J. W., 74
Wise, M. J., 801, 887
Wolfersberger, S. C., 537, 582, 676
Womble, C. C., 537
Wonson, S. L., 538
Wood, A. R., 801
Wood, B. F., 1097

Wood, B. T., 936
Wood, F. H., 887, 1000
Wood, P. O., 1205
Woodard, C., 635, 801
Woodfin, J. E., 538
Woods, C. W., 74
Woods, R. O., 130
Woodward, Clayton N., 537
Woodworth, James G., 722
Wooley, P. E., 433
Worcester, H. A., 128, 208
Wortham, E. S., 35
Wright, C. A., 128
Wright, E. E., 1143
Wroe, W. L., 801
Wyman, O. C., 207, 801

Yantis, Frank S., 310
Young, H. D., 802

Zeigler, E. H., 676, 1143
Zollinger, L. R., 1097
Zook, Morris A., 434, 802

OBITUARY.

[Portraits are indicated thus.*]

Adreon, Edward L., Jr., 1046
Aird, Gordon A., 167
Andrews, George, 677

Barnett, William E., 724
Bettis, Horace I., 1045
Borner, William, 1246
Boutell, Alexander A., 1046
Brady, Anthony N., 209
Brown, Alexander, 76
Brown, Frank E., 842

Carskaddon, Benjamin W., 842
Charlton, James, 1045*
Cook, John S., 434, 478*
Coughlin, John J., 351
Crary, George W., 394
Crawford, James H., 1205

Doherty, Charles J., 628

Emerson, Thomas M., 1035
Ensign, John F., 636*
Evarts, Maxwell, 677

Finley, W. W., 1034*

Fitzgerald, Thomas J., 35
Florence, Charles A., 724

Gilmore, Frank M., 1248
Girtin, W. F., 210
Gordon, William G., 889
Grafton, W. McC., 725*

Hagerman, James, 1097
Hanson, Arthur S., 209
Harris, Joseph E., 1002
Hartman, H. W., 677
Haskell, Frederick A., 889
Haupt, Samuel B., 636
Hill, David S., 130
Hopkins, Sidney Wright, 1248
Hudson, S. M., 677

Ingham, William Armstrong, 584
Irwin, George L., 394

Johann, Jacob, 889
Johnson, W. P., 1002
Jones, Dwight A., 1145

Kretzinger, George W., 1002

Lee, George F., 842
Lewis, Benjamin Tucker, 726, 803
Luther, Reese Zollinger, 802

MacKinnon, Paul R., 130
Marble, John H., 1005, 1042*
Martin, Henry, 1145
McRoberts, G., 130
Musson, C. S., 1205

Newhall, Daniel Smith, 130
Noble, L. C., 168
Noble, Stephen W., 802

Parrott, Joseph Robinson, 725*
Pfender, C. E., 1002
Pope, Alfred A., 312*
Prindville, E. S., 842

Ramsey, Matthew J., 937
Ray, William F., 636
Rhone, Mitchell D., 1205
Roach, Milton C., 1002
Robertson, Frederick C. N., 478
Rodgers, Ashmead Gray, 890

Sandberg, Christer P., 1246
Savage, F. S., 1246
Schreiber, Henry B., 633
Silver, Herman, 394
Smith, Charles H., 937
Smith, James, 636
Smith, William Carpenter, 394
Sprigg, William Osbourne, 842
Stetson, Adelbert B., 1003
Sutherland, David S., 1246

Taft, Edward A., 209
Taussig, Dr. William, 130
Taylor, C. M., 434
Taylor, J. H., 167
Thomas, John W., Jr., 1205
Thompson, Henry Martyn, 130
Totten, R. C., 1207*
Trimble, Judge J. McD., 539

White, E. T., 677
Wiley, J. R., 844
Williams, A., 1002
Woods, Edwin S., 1003*

INTERSTATE COMMERCE COMMISSION RULINGS.

[See also General Index.]

Acme Portland Cement Company v. American Express Company, 885

Allentown Portland Cement Company v. Philadelphia & Reading et al., 72

American Agricultural Chemical Company v. Bangor & Aroostook et al., 1043

American Brake Shoe & Foundry Company v. Belt Railway Company of Chattanooga et al., 1092

Aransas Pass Channel & Dock Company v. Galveston, Harrisburg & San Antonio et al., 72

Arizona Corporation Commission v. Atchison, Topeka & Santa Fe, 1042

Atlanta Journal Company et al. v. Seaboard Air Line et al., 247

Atlantic Packing Company of Baltimore City et al. v. American Express Company et al., 431

Birge-Forbes Company v. Missouri, Kansas & Texas et al., 1092

Board of Trade of Carrollton, Ga., et al. v. Central of Georgia et al., 248

Board of Trade of the City of Chicago v. Chicago & Alton et al., 125

Boney & Harper Milling Company v. Atlantic Coast Line et al., 1043

Boston Chamber of Commerce et al. v. Atchison, Topeka & Santa Fe et al., 392

Bruce & West Manufacturing Company v. Erie Railroad et al., 206

Bureau of Railroad Commissioners of the State of Montana v. Denver & Rio Grande et al., 123

California Pole & Piling Company et al. v. Southern Pacific, 164

Carnegie Board of Trade et al. v. Pennsylvania Company et al., 244

Cedar Rapids Commercial Club v. Chicago, Rock Island & Pacific, 244

City of Montgomery, Ga., v. Central of Georgia et al., 839

Clinton Sugar Refining Company v. Chicago & North Western Railway Company, 1092

Colorado Manufacturers' Association et al. v. Atchison, Topeka & Santa Fe et al., 247

Columbia Chamber of Commerce v. Southern Railway et al., 998

Commercial Club of Omaha v. Anderson & Saline River Railroad Company et al.; and 17 other cases disposed of in the report itself or the orders entered herein, 32

Commercial clubs of the city of Duluth v. Baltimore & Ohio et al., 164

Consolidated Fuel Company et al. v. Atchison, Topeka & Santa Fe et al., 124

Consolidated Pump Company v. Lake Shore & Michigan Southern et al., 72

Crutchfield, Woolfolk & Clore et al. v. Florida East Coast Railway et al., 885

Dairymen's Supply Company v. Pennsylvania Railroad et al., 1093

Dillon Coal & Transfer Company v. Oregon Short Line et al., 244

Dixie Dairymen's Association v. Yazoo & Mississippi Valley, 124

East Duquesne Supply Company v. Illinois Central, 1092

Eastern Wheel Manufacturers' Association et al. v. Alabama & Vicksburg, 32

Federal Milling Company v. Minneapolis, St. Paul & Sault Ste. Marie et al., 164

Franke Grain Company v. Illinois Central et al., 205

Gotttron Brothers Company v. Genesee & Wyoming et al., 206

Hampton Manufacturing Company v. Old Dominion Steamship Company et al., 164

Haverhill Box Board Company v. Boston & Maine et al., 931

Hennepin Paper Company et al. v. Northern Pacific et al., 164

Holland Blow Stave Company v. Atlantic Coast Line et al., 123

Huerfano Coal Company et al. v. Colorado & Southern et al., 1203

In re advances in rates for the transportation of lumber and shingles from North Pacific Coast territory to points in Minnesota, Wisconsin and other states, 72

In re coal rates from the anthracite regions to points on the New Haven Railroad, 349

In re Express Rates, Practices, Accounts and Revenues, 1042

In re investigation and suspension of advances in charges by carriers for the refrigeration of carload shipments of fruit, vegetables, etc., between points in Colorado and Utah, 885

In re investigation of alleged irregularities and discrepancies in the weighing of freight by carriers subject to the acts to regulate commerce, 248

In re investigation and suspension of advances in class and commodity rates between points in Iowa and Minnesota and points in Pacific territory, 206

In re investigation and suspension of advances in rates by carriers for the transportation of butter and eggs from Topeka, Kan., to Memphis, Tenn., and other points, 164

In re investigation and suspension of advances in rates by carriers for the transportation of coal and other commodities between Zeigler, Ill., and points in Missouri, Iowa and other states by cancellation of joint rates in connection with Chicago, Zeigler & Gulf, 32

In re investigation and suspension of advances in rates by carriers for the transportation of cotton seed and cotton seed products from points in Texas to New Orleans, La., 347

In re investigation and suspension of advances in rates by carriers for the transportation of hard-wood and other kinds of lumber and articles manufactured therefrom from points in Arkansas, Louisiana, and other points to Memphis, Tenn., St. Louis, Mo., and other points of destination, 124

In re investigation and suspension of advances in rates by carriers for the transportation of lumber, shingles, and other articles from points located on the Washington Western Railway to points in Minnesota, Illinois, Indiana and other states, 124

In re investigation and suspension of advances in rates by carriers for the transportation of tin cans and other commodities between points in the state of California and points in other states, 349

In re investigation and suspension of advances in rates by carriers for the transportation of wheat from Kansas City, Mo., and other points, to Edwardsville, Ill., Lawrenceville, Ill., and other points, 32

In re investigation and suspension of new milling-in-transit regulations applicable on the products of corn milled or mixed at Oneonta, N. Y., 31

In re investigation and suspension of Ohio river hay rates, 123

In re investigation and suspension of rates by carriers for the transportation of tin cans and other commodities between points in the state of California and points in other states, 31

In re investigation and suspension of salt rates from Wisconsin to Iowa, etc., 123

In re investigation of alleged unreasonable rates and passages involved in the transportation of live stock, packing house products and fresh meat from various southwestern points to packing houses, and thence to various destinations. Corporation Commission of Oklahoma v. Atchison, Topeka & Santa Fe et al., 998

In re practices and regulations governing the issuance, sale and exchange of mileage books, 885

In re rates, classifications, regulations, and practices of carriers, 73

Iowa State Board of Railroad Commissioners v. Arizona Eastern et al., 247

Keats, H. L., Auto Company v. Oregon-Washington Railroad & Navigation Company et al., 1093

Klauser Manufacturing Company v. Atchison, Topeka & Santa Fe, 1240

Koehler Produce Company et al. v. Pennsylvania Railroad et al., 125

Lagrange Chamber of Commerce v. Atlanta & West Point et al., 244

Lebanon Commercial Club v. Louisville & Nashville et al., 884

Lee, George A., Company v. Illinois Central, 1240

Lesser-Goldman Cotton Company et al. v. St. Louis, Iron Mountain & Southern et al., 164

Louisville Board of Trade et al. v. Indianapolis, Columbus & Southern Traction Company et al., 164

Manufacturers' Railway Company et al. v. St. Louis, Iron Mountain & Southern et al., 247

Marian Coal Company v. Delaware, Lackawanna & Western, 72

Mason Brothers v. Southern Pacific et al., 1043

Mayor and City Council of Vienna, Ga., v. Georgia Southern & Florida et al., 247

Mayor and Council of Douglas, Ga., et al. v. Atlanta, Birmingham & Atlantic, 1043

Memphis Freight Bureau v. Illinois Central et al., 124

Menzies-DuBois Auto Company v. Oregon-Washington Railroad & Navigation Company et al., 1093

Meridian Board of Trade & Cotton Exchange v. Alabama Great Southern et al., 1092

Milliken Refining Company v. St. Louis & San Francisco et al., 72

Milwaukee Maltsters' Traffic Association v. Grand Trunk Western et al., 1093

Minneapolis Cereal Company v. Chicago & North Western et al., 1092

Morton Salt Company v. Buffalo, Rochester & Pittsburgh et al., 206

Morton Salt Company et al. v. Morgan's Louisiana & Texas Railroad & Steamship Company et al., 1044

National Coal Company v. Baltimore & Ohio, 1092

National Lumber Exporters' Association v. St. Louis, Iron Mountain & Southern et al., 306

New England Electric Company v. Chicago, Rock Island & Pacific, 1043

Port Arthur Board of Trade v. Abilene & Southern et al., 73

Railroad Commissioners of the State of Florida v. Atlantic Coast Line et al., 998

Schmidt, Charles F., & Peters, Inc., v. Atchison, Topeka & Santa Fe et al., 1092

Scott-Mayer Commission Company v. Chicago, Rock Island & Pacific et al., 1240

Sheridan Chamber of Commerce v. Chicago, Burlington & Quincy et al., 839

Sioux Terminal Elevator Company et al. v. Chicago, Milwaukee & St. Paul et al., 124

Southwestern Woodenware Company v. Chicago, Milwaukee & Puget Sound et al., 431

Springfield Commercial Association of Springfield, Ill., v. Pennsylvania Railroad et al., 1240

State of Iowa et al. v. Atchison, Topeka & Santa Fe et al., 247

State of Iowa et al. v. Chicago, St. Paul, Minneapolis & Omaha et al., 247

State of Kansas et al. v. Atchison, Topeka & Santa Fe et al., 164

Sterling Salt Company v. Pennsylvania Railroad et al., 206

Suspension of commutation rates between New York and points in Connecticut, 72

Taylor, John, Dry Goods Company et al. v. Missouri Pacific et al., 310, 931

Toledo Produce Exchange v. Ann Arbor et al., 124

Topeka Traffic Association v. Alabama & Vicksburg et al., 31

Town of Pelham, Ga., v. Atlantic Coast Line et al., 1043

Traffic Association of St. Louis Coffee Importers v. Illinois Central et al., 1093

Traffic Bureau of Nashville, Tenn., v. Louisville & Nashville et al., 1243

United Refrigerator & Ice Machine Company v. Chicago & North Western et al., 1043

United States of America v. Union Pacific et al., 1204

Victor Manufacturing Company et al. v. Southern Railway. Enrære Manufacturing Company et al. v. Louisville & Nashville et al., 164

Volco Manufacturing Company v. Atchison, Topeka & Santa Fe, 839

Vulcan Iron Works Company v. Atchison, Topeka & Santa Fe et al., 72

Washington Milling Company v. Norfolk & Western Railway Company et al., 164

Washington, D. C., store-door delivery, 31

Wausau Advancement Association et al. v. Chicago & North Western, 1043

Western Fruit Jobbers' Association of America v. Chicago, Rock Island & Pacific et al., 72

Weyl-Zuckerman & Company v. Colorado Midland et al., 72

RAILWAY CONSTRUCTION.

Alabama & Mississippi, 938

Alberta, Peace River & Eastern, 1207

Albuquerque, Cortez & Salt Lake, 1047

Alexandria & Western, 36

Algoma Central & Hudson Bay, 131, 726, 938

Algoma Eastern, 131, 726, 938

All Red Line Railway, 1003

Alton & Southern, 313, 1207

Alva & Northwestern, 131

Anacortes & Eastern, 313

Anthony & Northern, 253, 585

Appalachian Electric Power & Transit Company, 169

Arizona Roads, 395

Arkansas Interurban, 844

Atchison, Topeka & Santa Fe, 313, 805

Atlantic Coast Line, 1047

Augusta & Edgefield (Electric), 211

Baltimore & Ohio, 436, 1047

Barclay & Riverton, 1099

Big Sandy & Kentucky River, 36

Birmingham, Ensley & Bessemer (Electric), 1207

Birmingham-Tuscaloosa Railway & Utilities Company (Electric), 541

Birmingham & Southeastern, 131

Bismarck, Bellevue Valley & Western, 1003

Black Mountain, 541

Boston & Albany, 1047

Bridgeport & Southern, 395

Brinson Railway, 313

British Columbia Electric, 726

Brooklyn Rapid Transit, 353

Buctouche Railway & Transportation, 313

Buffalo Coal & Lumber Railroad, 1047

Butler County, 353

Butte-Boise Winnemucca, 131, 211, 313

Butte, Wisdom & Pacific, 353, 541

Bryan & Texas Central, 585

Cache Valley, 36

Calgary & Fernie, 131

California, Oregon & Eastern, 211, 436

California Roads (Electric), 805

Camden, Summerville & Gauley Bridge Railroad, 585

Campbellford, Lake Ontario & Western, 479

Canadian Alberta, 938

Canadian Northern, 637, 1249

Canadian Northern Pacific, 637

Canadian Pacific, 77, 131, 211, 313, 436, 479, 726, 805, 891, 938, 1003, 1207.

Canadian Roads, 726, 1099

Carolina & Georgia, 1207

Carolina & Yadkin River, 541

Cary, North & South, 1207

Cedar Rapids & Iowa City, 1099

Central Canada, 938

Central New England, 1147

Central Pacific, 1099

Central Utah, 1207

Charleston Northern, 938, 1207

Charlottesville Interurban, 211

Cherry River & Southern, 1099

Chesapeake & Ohio, 679

Cheyenne Short Line, 169

Chicago & Alton, 679

Chicago & North Western, 36, 585

Chicago, Burlington & Quincy, 637, 805, 844, 891, 1003

Chicago, Milwaukee & St. Paul, 313, 436, 679, 938, 1099, 1249

Chicago, Peoria & Quincy Traction, 726

Chicago, Rock Island & Pacific, 36, 726, 805

Chicago, St. Paul, Minneapolis & Omaha, 1047

Cincinnati, Georgetown & Portsmouth, 1047

Cincinnati, New Orleans & Texas Pacific, 938

Clarksburg Northern, 585

Clear Lake, 938

Colorado, Kansas & Oklahoma, 211, 313, 805

Colorado Roads, 1047

Colorado, Wyoming & Northern, 726

Columbia & Nehalem, 1047

Cumberland Railroad, 1048

Columbia & Puget Sound, 1047

Columbus, Kenton & Toledo Traction, 353

Colusa & Hamilton, 1099

Coos Bay & Coquille Valley, 726

Copper Range, 77

Corinth & Northeastern, 131

Cumberland Valley Electric, 169, 679

Dakota Eastern, 436

Dallas, Corsicana & Palestine, 353, 436

Dallas, Fairfield & Gulf, 436

Dallas Northwestern Traction, 169

Dallas Southwestern Traction, 169, 1003

Dan River Railway (Electric), 1249

Dayton, Middletown & Cincinnati (Electric), 253

Denver & Rio Grande, 1003

Denver & Salt Lake, 253, 395, 436, 805, 1048

Detroit, Bay City & Western, 541, 1004

Detroit, Lansing & Grand Rapids, 805

Dez Quinze & Blanche River, 891

Dixie Railway, 211

Dolores, Paradox & Grand Junction, 805

Dominion Atlantic, 727, 1004, 1147

Duluth & Iron Range, 436

East & West Coast, 727, 1249

Elberton & Eastern, 36, 1207

Elkin & Allegheny, 479

Erie, 436

Essex Terminal Railway, 805, 1048

Esquimalt & Nanaimo, 131, 1207

Fairmount & Veblen, 585

Florida East Coast, 727

Foristell, Camp Creek & Northeastern, 36

Fort Smith, Poteau & Western, 1048

Fort Worth-Denton Interurban, 1249

Fox & Illinois Union (Electric), 211

Fresno Traction, 353

Frontier Electric, 313

Gainesville Midland, 1048

Georgia Coast & Piedmont, 436

Glen Rose & Walnut Springs, 1048

Goldsboro, Seven Springs & Swansboro, 939

Grand Rapids & Indiana, 131

Grand Rapids & Northwestern, 1048, 1147

Grand Trunk, 353, 479, 805, 939

Grand Trunk Pacific, 131, 541, 939, 1099

Grants Pass-Crescent City, 1099

Great Northern, 211, 313

Great Northern & Gulf Central, 353

Greene County, 844

Green River & Uintah Basin, 805

Greenville, Blue Ridge & Northern, 541

Guadalupe Valley Traction, 169

Gulf, Florida & Alabama, 679, 727, 939, 1048

Gulf, Freeport & Northern, 36, 169, 637

Halifax Terminal, 131

Hastings & Northwestern, 169

Henryetta Interurban, 436, 541, 805

Hiawasee Valley, 395

Hocking Valley, 1048

Hoosac Tunnel & Wilmington, 1048

RAILWAY CONSTRUCTION—Continued.

Houston & Brazos Valley, 1099
Houston & Texas Central, 395, 541, 585, 805
Hudson Bay Railway, 586

Idaho Roads (Electric), 541
Illinois Central, 77, 586, 727
Illinois Midland, 1249
Illinois Traction, 541
Intercolonial Railway, 36, 131, 395, 891, 1004
Interurban Railroad, 1207

Jefferson County Traction, 436
Joliet & Lake Manuan Colonization, 1207
Joplin & Pittsburg (Electric), 1048

Kansas City Terminal, 1147
Kansas, Oklahoma & Southwestern, 637
Kettle Valley, 211, 313
Kingston & Excelsior Springs (Electric), 169, 253
Knoxville & Maryville Interurban, 131

Lachine, Jacques Cartier & Maisonneuve, 939
Lake Erie & Eastern, 436
Lake Erie & Youngstown (Electric), 436, 844
Latour Creek, 36
Laurel Light & Railroad, 77
Lehigh & New England, 1004
Lexington & Eastern, 36, 586
Liberty-White, 1004
Little Rock, Pine Bluff & Eastern Traction, 313

London, Grand Bend & Stratford, 805
Lorain, Ashland & Southern, 586
Louisiana & Arkansas, 541
Louisville & Nashville, 37, 586
L'Outre Railroad, 541
Lyndhurst Lumber Company's Line, 1208

Macoupin County Extension Railway, 37
Malvern & Camden, 805
Manatawny Railroad, 541
Margaree Coal & Railway, 131
Maryville-Knoxville Interurban, 132
Matador & Northern (Electric), 211
Memphis & Pensacola, 479
Meskill & Columbia River, 1249
Metolius, Prineville & Eastern, 1099
Mexican Roads, 169
Michigan Central, 541
Michigan Roads (Electric), 805
Midland Continental, 939
Minneapolis, St. Paul & Sault Ste. Marie, 313, 805, 939
Minneapolis, St. Paul, Rochester & Dubuque Traction, 211

Minneapolis Union Electric, 939
Minnesota & International, 169
Minnesota Central (Electric), 313
Missouri, Kansas & Texas, 211, 353, 1099
Moberly, Huntsville & Randolph Springs (Electric), 37
Mobile & Baldwin County (Electric), 37
Mound Railway, 1099
Mojave & Bakersfield, 353, 1099
Montezuma San Juan Southern, 313
Montour Railroad, 313
Montreal & Lake Victoria, 1147
Montreal & Southern Counties (Electric), 805
Morrisburg & Ottawa (Electric), 37
Motley County, 253

Naas Valley & Northern, 132
Nacodoches & Southeastern, 313
Nashville, Chattanooga & St. Louis, 1099
National Railways of Mexico, 169
Navajo Southern, 891
Nebraska Central, 1048
Nebraska Roads, 313

New Albany & French Lick Valley Traction, 541
New River, Holston & Western, 1048
New York, New Haven & Hartford, 939, 1147
New York Subways, 77, 169, 253, 353, 395, 541, 586, 679, 805, 844, 891, 939, 1048, 1147
Nezperce & Idaho 806
Niagara, St. Catharines & Toronto (Electric), 1048
Niobrara Water Power Railway, 727
Norfolk Southern, 77, 586
Norman Interurban, 353, 1048
Northern Pacific, 211
North Louisiana (Electric), 541
Northport & Southwestern, 395
North Railway, 1099
North-Western of South Carolina, 1004
Northwestern Pennsylvania (Electric), 1048
North Yakima & Valley, 1099
Nueces Valley, Rio Grande & Gulf, 637, 727

Oakland, Antioch & Eastern (Electric), 479
Oakwood & Trinity River Southern, 132
Ocilla Southern, 1004
Ohio River & Columbus, 1048
Ohio Roads (Electric), 169
Ohio Southwestern System, 1048
Oil Belt, 541
Okeechobee Interurban, 637
Oklahoma & Texas Central, 541
Oklahoma, New Mexico & Pacific, 313, 844
Oklahoma Railway (Electric), 353, 1048
Oklahoma Roads, 396, 1208, 1249
Oklahoma Roads (Electric), 353
Olympia Southern, 132
Oneida & Western, 844, 939, 1004
Ontario Lake Front Terminal, 939
Orangeburg Railway, 313
Oregon Electric, 1208
Oregon Short Line, 132, 541, 939, 1148
Oregon-Washington Railroad & Navigation Company, 637
Orleans-Kenner (Electric), 169
Ottawa, Northern & Western, 1004

Pacific & Hudson Bay, 727
Pacific Electric, 1208
Pacific Great Eastern, 542, 806, 1249
Pacific, Peace River & Athabasca, 939
Palacios, San Antonio & Pecos Valley, 806
Palestine, Corsicana & Dallas, 1048
Pawhuska & Northeastern, 132, 169, 253
Pee Dee Valley, 77
Pennsylvania Railroad, 940, 1048
Pennsylvania Southern, 313, 396
Petersburg & Columbia Springs, 891
Piedmont Northern Lines (Electric), 1249
Pine Bluff & Northern, 211
Pine Bluff & Southern, 132
Pittsburgh & Lake Erie, 437
Pittsburgh, Shawmut & Northern, 940, 1099
Porcupine Rand Belt Electric, 637
Portland & Oregon City (Electric), 169, 806
Portland, Eugene & Eastern (Electric), 437, 806
Puget Sound & Willapa Harbor, 313, 437, 679, 940, 1099

Quannah, Acme & Pacific, 1099

Raleigh, Charlotte & Southern, 77, 586, 940
Rapid Railroad, 1048
Riviera Beach & Western, 1004
Rockcastle River, 844
Rome & Northern, 1148

St. Elmo, Belle Helena & Louisiana Eastern, 727
St. John & Quebec, 396, 586

St. Joseph Valley, 1249
St. Louis & San Francisco, 77
St. Louis, Iron Mountain & Southern, 132
St. Louis, Peoria & North Western, 37
St. Louis Southwestern, 679, 1049
St. Paul & Kansas City Short Line, 37
Sacramento Valley (Electric), 638
Salem, Falls City & Western, 132
Salina Canyon, 940
Salt Lake & Alta, 437, 1049
Salt Lake & Idaho, 1148
Saluda-Hendersonville Interurban, 1249
San Antonio & Austin Interurban, 169, 727
San Antonio, Fredericksburg & Northern, 479, 940
San Antonio, Uvalde & Gulf, 132, 253, 313, 844
San Benito & Rio Grande Valley, 479
San Luis Central, 586
San Pedro, Los Angeles & Salt Lake, 1148
San Rafael & San Anselmo Valley (Electric), 437
Seaboard Air Line, 679, 1099
Seattle, Port Angeles & Lake Crescent, 542, 1099
Shefford, Bagot & Missisquoi, 1049
Shelby County, 37
South Dakota Central, 727
Southern New England, 211, 353, 479
Southern Pacific, 353, 1099
Southern Railway, 727
South Ontario Pacific, 1004
Southwestern Traction, 170, 845
Southwestern Traction & Power Company, 170, 727
Springfield & Pana, 353
Standard Coal Company's Lines, 77
Sudbury, Kepawa & Bell River, 891
Sultan Valley, 542
Surprise Valley Railway, 254, 353

Temple, Northwestern & Gulf, 396, 891
Texas Roads, 396, 1208
Thessalon & Northern, 1004
Tilsonburg, Lake Erie & Pacific, 1004
Timpson & Henderson, 170
Tobique & Campbellton, 170
Tonopah & Tidewater, 1099
Toronto, Hamilton & Buffalo, 437, 806
Tri-State Railways Company of Michigan, 638, 727
Tristate Traction, 1208
Trona Railway, 728

Ungava Railway, 891
Union Pacific, 170, 542
Utah Railroad, 1099
Utah Roads, 638
Uwarie & Pee Dee Valley, 845

Van Horn Valley, 211, 437

Wabash, 211
Warren, Johnsville & Saline River, 1208
Washington & Old Dominion, 254
Washington Roads, 1208
Watauga & Yadkin River, 37, 1100
Watauga Railway, 1100
Waterloo, Cedar Falls & Northern (Electric), 638, 940, 1100
West Coast, 638
Western Maryland, 211
Weston & Glenville (Electric), 1249
West Ontario Pacific, 940
West Virginia & Southern, 1004
Willamette-Pacific, 1100
Winnemucca Northern, 845

Yadkin River, 1100
Yazoo & Mississippi Valley, 78

RAILWAY FINANCIAL NEWS.

Alabama Great Southern, 892, 1100
Atchison, Topeka & Santa Fe, 170, 314, 480, 892, 1250
Atlanta, Birmingham & Atlantic, 38, 314, 892
Atlantic Coast Line, 680
Atlantic Northern & Southern, 354
Atlantic Southern Railroad, 354

Bangor & Aroostook, 78
Baltimore & Ohio, 170, 437, 587, 1004
Baltimore & Ohio Chicago Terminal, 680
Bangor & Aroostook, 806, 845, 892
Bennettsville & Cheraw, 1148
Birmingham, Selma & Pensacola, 354
Boston & Maine, 78, 314, 542, 728, 1250
Boston, Revere Beach & Lynn, 1049
Brinson Railway, 354, 437
Brooklyn Rapid Transit, 437, 542
Buffalo & Susquehanna, 314, 354, 892, 1004, 1100, 1148
Buffalo, Rochester & Pittsburgh, 212

Canadian Northern, 437, 1208
Canadian Pacific, 38, 437, 1149
Carolina, Clinchfield & Ohio, 78
Cassville & Western, 132
Chesapeake & Ohio, 38, 1148
Chicago & Alton, 354

Chicago & Eastern Illinois, 38, 1208, 1250
Chicago & North Western, 354, 892
Chicago & Western Indiana, 1049
Chicago Great Western, 78, 542
Chicago, Milwaukee & St. Paul, 38, 396, 1250
Chicago, Rock Island & Pacific, 845, 892, 1148
Chicago, Terre Haute & Southeastern, 254
Cincinnati, Hamilton & Dayton, 212
Cleveland, Cincinnati, Chicago & St. Louis, 396, 728
Cleveland Short Line, 1208
Colorado, Kansas & Oklahoma, 396
Colorado Midland, 638
Connecticut River Railroad, 638

Delaware & Hudson, 728, 1250
Delaware, Lackawanna & Western, 1148
Denver & Rio Grande, 638
Denver & Salt Lake, 396, 680
Detroit, Toledo & Ironton, 38, 254, 638, 806, 1208, 1250

Erie, 38, 480, 806, 1250

Fairmount & Veblen, 892
Fitchburg, 587, 680
Florida East Coast, 480
Fort Dodge, Des Moines & Southern, 587, 940

Fort Worth & Denver City, 1049

Galveston-Houston Electric, 480
Galveston, Houston & Henderson, 1049
Georgia & Florida, 1049
Greenville & Knoxville, 806

Hampden Railroad, 1250
Hawkinsville & Florida Southern, 254
Hocking Valley, 254, 845, 892

Illinois Central, 212, 254, 806, 1004, 1049, 1208
International & Great Northern, 38, 940
Interstate Transfer Railway, 940

Kansas & Southwestern, 170
Kansas City, Mexico & Orient, 354, 1004

Lake Shore & Michigan Southern, 437, 542
Lehigh Valley, 542, 1148
Louisiana & North West, 396
Louisville & Nashville, 638

Maine Central, 78
Manistee & Grand Rapids, 314
Memphis Union Station, 728
Mexican Railway, 892
Michigan Central, 437

Middletown & Unionville, 1100
 Middletown, Unionville & Water Gap, 892
 Minneapolis, St. Paul & Sault Ste. Marie, 1250
 Missouri, Kansas & Texas, 38, 132
 Missouri, Oklahoma & Gulf, 638, 1208
 Mobile & Ohio, 38

Nashville, Chattanooga & St. Louis, 38
 National Railways of Mexico, 38, 314, 542, 680, 1004, 1100
 New Orleans, Mobile & Chicago, 396, 1250
 New Orleans, Texas & Mexico, 132, 254, 806, 1100
 New York Central & Hudson River, 132, 542, 892, 1049, 1250
 New York Connecting, 437, 1004, 1049
 New York, New Haven & Hartford, 78, 132, 170, 254, 314, 396, 480, 587, 680, 728, 806, 940, 1004
 New York, Ontario & Western, 638
 New York, Susquehanna & Western, 892
 New York, Westchester & Boston, 132
 Norfolk Southern, 728
 North & South Carolina, 1100
 Northern Pacific, 132
 Northwestern Terminal, 396

Oakland, Antioch & Eastern, 38, 132

Ocean Shore, 1049
 Orange & Northeastern, 806

Pacific & Eastern, 38
 Pacific Railways of Nicaragua, 892
 Paragould Southeastern, 314, 638, 680
 Pennsylvania, 170, 638, 845, 1250
 Philadelphia, Baltimore & Washington, 314
 Pittsburgh, Cincinnati, Chicago & St. Louis, 314, 396
 Port Bolivar Iron Ore Railway, 892

Rio Grande Junction, 638
 Rock Island Memphis Terminal Co., 354
 Rock Island, Stuttgart & Southern, 1148

St. Louis & San Francisco, 38, 78, 132, 480, 542, 587, 638, 806, 845, 892, 940, 1004, 1148, 1208
 St. Louis, Brownsville & Mexico, 132
 St. Louis, El Reno & Western, 1250
 St. Louis, Iron Mountain & Southern, 314
 St. Louis, Peoria & Northwestern, 354, 892
 St. Louis, Rocky Mountain & Pacific, 170, 314, 354, 1100
 St. Louis Southwestern, 38, 314, 354, 542, 638, 680

San Antonio, Uvalde & Gulf, 638
 Sanford & Everglades, 680
 San Pedro, Los Angeles & Salt Lake, 78
 Seaboard Air Line, 212, 1100
 Southern Pacific, 38, 212, 480, 542
 Southern Railway, 170, 354, 638
 Sparrows Point, 314
 Spokane, Portland & Seattle, 38
 Stephenville North & South Texas, 38
 Sugar Land Railroad, 132, 845

Texas & Pacific, 680
 Toledo, St. Louis & Western, 892
 Tonopah & Goldfield, 587
 Trans-Mississippi Terminal Co., 680

Union Pacific, 38, 212, 314, 354, 587, 728, 892

Valdosta, Moultrie & Western, 437
 Valley Terminal Railway, 354

Wabash, 132, 170, 212, 1208
 Wabash-Pittsburgh Terminal, 1208
 Western Maryland, 1250
 Western Railway of Alabama, 1148
 Wheeling & Lake Erie, 132, 314
 West Jersey & Seashore, 170
 Williamsville, Greenville & St. Louis, 587

FOREIGN RAILWAY NOTES.

[See also General Index, under subjects and names.]

Abyssinia, 378
 Afghanistan, 1249
 Africa, 37, 56, 150, 354, 413, 458, 479, 493, 573, 638, 649, 656, 757, 759, 804, 843, 914, 917, 1145
 Argentina, 6, 25, 38, 44, 76, 314, 329, 338, 349, 454, 458, 480, 627, 633, 636, 711, 766, 816, 908, 957, 966, 1024, 1134, 1248, 1249
 Australia, 53, 61, 73, 118, 202, 209, 435, 437, 502, 587, 703, 804, 825, 892, 913, 981, 1022, 1024
 Austria, 27
 Balearic Islands, 377
 Belgium, 402, 878, 1214
 Bolivia, 314, 338, 728
 Brazil, 25, 1246
 Bulgaria, 908
 Burma, 431
 Ceylon, 131, 800
 Chile, 207, 314, 437, 587, 627
 China, 25, 51, 58, 73, 76, 78, 132, 170, 174, 178, 181, 207, 209, 420, 458, 542, 614, 793, 843, 952, 990, 1002, 1065, 1194, 1247, 1249
 Congo, 869
 Colombia, 10, 157, 170, 212, 326, 420
 Cuba, 149, 207, 330
 Cyprus, 780
 Denmark, 1121

Ecuador, 116, 725
 Egypt, 423, 426
 England, 198, 413, 510, 566, 574, 602, 622, 626, 825, 845, 889, 892, 908, 917, 1166, 1248, 1250
 Formosa, 654
 France, 291, 446, 576, 1019, 1049, 1128
 Germany, 698, 744, 986, 1022, 1117, 1122, 1129, 1170, 1247
 Greece, 431
 Haiti, 84
 Honduras, 105, 351, 420
 India, 18, 38, 61, 90, 97, 105, 112, 131, 182, 217, 220, 224, 229, 235, 249, 310, 389, 394, 418, 446, 540, 584, 587, 604, 608, 614, 658, 694, 802, 937, 940, 1194
 Italy, 18, 406, 478, 558, 650
 Japan, 372, 431, 514, 806
 Java, 1060, 1074
 Kashmir, 1235
 Madagascar, 21
 Madras, 252
 Malay States, 212
 Manchuria, 176, 229, 338, 353, 494, 1166, 1246
 New South Wales, 394, 713, 859

New Zealand, 712, 924, 1193
 Nigeria, 602
 Norway, 480
 Paraguay, 478, 616
 Philippines, 1021, 1227
 Queensland, 1083
 Roumania, 312
 Russia, 25, 217, 364, 638, 678, 820, 940, 957, 988, 1114, 1250
 Salvador, 1098
 San Domingo, 575
 Scotland, 364, 587
 Serbia, 587
 Siberia, 509
 Siam, 212
 South Australia, 1068
 Spain, 35, 154, 157, 159, 341, 351, 353, 373, 509, 582, 646, 662, 665, 802, 890, 1033, 1049, 1170
 Sweden, 1083, 1121, 1134
 Switzerland, 386, 480, 539, 662, 680, 758, 768, 826, 843, 908, 1244
 Syria, 1077
 Turkey, 542, 663, 1018
 Uruguay, 168
 Victoria, 1214
 Zululand, 238